DOCUMENT RESUME

ED 471 931 RC 023 867

| | |
|---|---|
| AUTHOR | Giugale, Marcelo M., Ed.; Lafourcade, Olivier, Ed.; Luff, Connie, Ed. |
| TITLE | Columbia: The Economic Foundation of Peace. Chapters 21-28. |
| INSTITUTION | World Bank, Washington, DC. |
| ISBN | ISBN-0-8213-5348-9 |
| PUB DATE | 2003-00-00 |
| NOTE | 210p.; Chapters 1-20 and 29-35 are not available from EDRS. |
| AVAILABLE FROM | Book available from World Bank Publications, P.O. Box 960, Herndon, VA 20172-0960; Tel: 800-645-7247 (Toll Free); e-mail: books@worldbank.org ($65.00 plus $8.00 shipping). |
| PUB TYPE | Books (010) -- Reports - Evaluative (142) |
| EDRS PRICE | EDRS Price MF01 Plus Postage. PC Not Available from EDRS |
| DESCRIPTORS | *Access to Education; Access to Health Care; American Indians; Civil Rights; *Educational Needs; Educational Quality; *Elementary Secondary Education; Enrollment Trends; Gender Issues; *Higher Education; Human Capital; Minority Groups; Poverty; *Public Policy; Rural Urban Differences; Welfare Services |
| IDENTIFIERS | *Colombia |

ABSTRACT

This document contains 8 chapters of a 35-chapter book that presents a comprehensive diagnosis of current economic, social, and educational conditions in Colombia and their importance to development prospects and the quest for peace. The eight chapters covered here are part of a section titled "Sharing the Fruits of Growth with All Colombians." Chapter 21, "Education" (Eduardo Velez), describes Colombia's education system and current enrollment trends and focuses on seven policy issues: highly inequitable access to schooling, excluding poor and rural children; low, perhaps deteriorating, educational quality; high grade repetition and dropout rates; allocation of public expenditures; growing household demand for schooling; inefficient and inequitable decentralization of education management; and negative impacts of violence and social displacement on schooling. Chapter 22, "Health" (Maria-Luisa Escobar, Panagiota Panopoulou), looks at recent reforms in the health care system affecting financing, management, quality, and access. Chapter 23, "The Social Safety Net" (Laura B. Rawlings), outlines poverty rates among rural and urban children and youth and among displaced persons, and discusses social welfare programs relevant to these groups. Chapter 24, "Higher Education" (Lauritz Holm-Nielsen), discusses enrollment trends in higher education; rising returns to education; and problems with financing, governance, efficiency, and unequal access. Chapter 25, "Science and Technology" (Lauritz Holm-Nielsen), examines strengths and weaknesses in Colombia's science and technology sector, state of the country's information infrastructure, and lack of advanced human capital. Chapter 26, "Enhancing Employment Opportunities through the Labor Markets" (Vicente Fretes Cibils, Vicente Paqueo), discusses the labor market, industrial relations, lack of skilled workers, and needs for technical education and vocational training. Chapter 27, "Gender" (Maria Correia), discusses gender issues related to educational attainment, poverty, reproductive health, wage gaps, rural development, and violence. Chapter 28, "Indigenous Peoples and Afro-Colombian Communities" (Shelton Davis, Enrique Sanchez), discusses indigenous land rights, human rights, deterioration of health and socioeconomic conditions, and educational programs and development

Reproductions supplied by EDRS are the best that can be made
from the original document.

policies directed toward these communities. Appendices lists all ethnic groups in Colombia, demographic data, and social indicators. (Contains references in each chapter.) (SV)

Reproductions supplied by EDRS are the best that can be made
from the original document.

ED 471 931

# Columbia: The Economic Foundation of Peace.
## Chapters 21-28.

Giugale, Marcelo M., Ed.; Lafourcade, Olivier, Ed.; Luff, Connie, Ed.

World Bank, Washington, DC

RC 023 867

BEST COPY AVAILABLE

# 21

# Education

*This Chapter was written by Eduardo Velez with contributions from David Harding and Alfredo Sarmiento.*

## I. The Big Picture: Colombia's Education and Challenges

Colombia's economic growth is likely to be driven by its educated labor force, which means that productivity, and reduction in the poverty depend to a large degree on the performance of the education sector.

Today, the average formal education of Colombians 5 years old and above is roughly 7 years—a substantial gain from the level of 2.4 years in the 1960s. It took more than 20 years to double the educational achievement. However, Colombia still lags behind its neighboring countries Uruguay and Argentina with 13 years and Mexico, with 8 years formal education.

Net enrollment for children at the primary school age level is estimated at only 88 percent, about 54 percent in the basic secondary years, and 15 percent in tertiary education (MEN 2002). At the preschool level it is estimated that only 37 percent of children 3–5 years of age are enrolled. Major gains in schooling coverage were achieved in the decade of the 80s and early 90s, but stagnation in educational growth were felt beginning 1995, and got worse since the beginning of the crisis in 1998–99.

The most recent trends in Colombia's education system indicates that it faces major challenges:

- HIGHLY INEQUITABLE ACCESS TO SCHOOLING. Education access by the poor, especially rural children represents the main challenge. About 12 percent of children 6–11 are still out of school, nearly all of these children excluded from participation belong to the lowest income groups. Data from the most recent surveys (Sarmiento, 2000) shows that the education gap between the richest income decile and the poorest decile is roughly 7 years, and has increased over

3

the years. The picture is even worse for the secondary and tertiary levels, where the poor is largely excluded from schooling participation.

- SCHOOLING QUALITY IS LOW, PERHAPS DETERIORATING. Despite the increased public expenditures for education, quality of schooling is low and has deteriorated in recent years. Based on tests conducted by the *Instituto Colombiano de Fomento para la Education Superior* (ICFES), the percentage of schools with low achievements increased from 30 percent in the 1980s to 50 percent in the 1990s. The most recent international achievement tests in math and science for grade 7 and 8 students ranked Colombia way below countries in East Asia and OECD countries, more than one-standard deviation below the mean achievement scores.
- SECTOR EFFICIENCY IS LOW. The Colombian education system faces high rates of failure in all grades, particularly of repetition and drop out rates in the primary grades. For every 10 student enrolling in grade 1, only 6 will complete the primary cycle, and 3 will finish secondary school. Repetition in grade 1–4 is very high, particularly among the rural schools.
- PUBLIC EXPENDITURES FOR EDUCATION INCREASED, BUT ALLOCATION EFFICIENCY IS POOR. Public spending for education has increased markedly over the last 30 years, from 3.7 percent of GDP in 1984, to 5.1 percent of GDP in 1991, to 5.7 percent in the late 1990s. The large increase in the early 1990s resulted from passage of the new 1991 Constitution which mandated a fixed proportion of spending for social expenditures. Public education expenditures in Colombia is higher than most Latin American countries. The growth in public expenditures for education has largely been progressive especially at the primary level where the poorest income groups received the largest gains. However, at higher education the expenditures have been regressive—expenditures accrued to the higher income groups.
- HOUSEHOLD DEMAND FOR SCHOOLING IN COLOMBIA IS HIGH. Household surveys indicate that urban families spend as much as 20 percent of their incomes on education. In aggregate terms, overall spending by all households represent roughly 4.3 percent of GDP, which implies that private household expenditures approximate public sector allocation on education. Poor households spend a high proportion of their incomes to schooling (textbooks, notebooks, stationery, uniforms). Thus, although the public school system has free tuition, associated schooling expenditures are quite high, particularly for the poorest income groups.
- DECENTRALIZATION OF THE EDUCATION SERVICE DELIVERY IS A POSITIVE DEVELOPMENT, BUT ITS IMPLEMENTATION HAS BEEN INEFFICIENT AND INEQUITABLE. The decentralization of education management and operation is clearly a major achievement of the 1991 Constitution. However, the implementation has been inefficient. The fiscal reforms trailed behind decentralization. The government concentrated its efforts on financial and administrative reforms without strengthening local capacity at Department, Municipal and

institutional levels. It has been inequitable because the financial transfers favored the richer municipalities.

- THE NEGATIVE IMPACT OF VIOLENCE AND SOCIAL DISPLACEMENT ON SCHOOLING. Violence in Colombia has been identified as one of the key development constraints affecting schooling. Homicide rates increased by 167 percent between mid 1980s to 1990s. In many of the hard-hit areas, violence has limited the access to schools by both the teachers and the students. Death threats and killing of rural teachers by guerilla and paramilitary forces have resulted in abandoning of schools. Family conflicts, gangs, neighborhood drug abuse, and prostitution have strongly influenced school drop out rates, particularly of the secondary school students. Displacement of populations in many rural areas also affected schooling.

These issues are discussed in-depth in this Chapter and options are presented for consideration of the new government. These are highlighted alongside current and past government responses to address the problems. The policy options will serve as points of departure for a more thorough debate on improving the educational system of Colombia to respond to the emerging problems. Clearly, if Colombia must redress the income inequality (which is one amongst the worst in the region), it can begin with the education system. Education is key to growth, it is key to social cohesiveness, it is key to improvements in the whole social sectors—in health, social security and poverty alleviation.

## II. Colombia's Education System: Organization and Recent Trends

A DECENTRALIZED ADMINISTRATION OF THE EDUCATION SYSTEM. There are three territorial levels in the administrative organization of the public education sector in Colombia. The first is the National Ministry of Education (MEN), which is in charge of designing educational policies, formulating a minimum curriculum, and designing a basic set of rules and standards for the administration of the sector resources (human, physical, and financial). The second level is the Department, in charge of organizing the provision of the state educational services. Its main function is the management of teachers, school directors, and administrative personnel. It also provides technical support to the municipalities. The third level is the Municipality, in charge of actually delivering the state educational services, including the construction, maintenance, and equipment of the physical infrastructure. By law, municipal resources from the national budget must be directed to expenditures other than teacher salaries.

EDUCATIONAL LEVELS IN COLOMBIA. The formal education is delivered in approved educational establishments, subject to progressive curricular rules and leading to graduations and title. Today, Colombia's basic education system is divided into three levels, namely:

- the first level of preschool, with three grades (only the last one is mandatory),
- the second level which includes five years of primary school and six years of secondary school,[1] with the last two years of secondary education are called diversified middle education.
- a third level is post-secondary, with three sublevels: technological, of three years' duration; university, of five to seven years' duration; and the postgraduate sublevels, with masters and doctorate degrees.
- the system also includes non-formal and informal education.

Trends in each of the educational levels in Colombia can be summarized as follows:

### *a) Preschool Enrollment: Coverage is Low*

Enrollment in preschool programs is low—only 37 percent of children 3–5 years were enrolled in such programs in 2001, with only 4 percent participation in the rural areas (MEN, 2002). In addition, coverage varies by poverty level—only about 26 percent of students from poor households are enrolled compared to about 63 percent in the richest 20 percent of the population. A program of community-managed childcare homes *(Hogares de Bienestar Infantil)* reaches over 827,000 children (see Box 1). A second program, the Pre-School Child Care Centers, reaches over 150,000 children at risk of abandonment, malnutrition, or parental abuse, or who are members of lower-income families with working parents.

**Box 1. *Hogares de Bienestar Infantil***

*Hogares de Bienestar Infantil* (HBI) are community-managed, home-based childcare programs targeted at promoting the development of children under 7 years of age from poor households. Each HBI is run in the house of a Community Mother, who is selected by parents, and food, social stimulation, and health services are provided. By 1996, the program had reached over 827,000 children. This program is managed by the *Instituto Colombiano de Bienestar Familiar* (ICBF), which also runs other preschool program, the Pre-School Child Care Centers, which are center-based facilities operated by professional childcare attendants.

---

[1] The last grade of preschool, the five of primary school, and the first four of secondary school are defined as basic education.

### *b) Primary Enrollment Trends: High Coverage, But Stagnating with 12 Percent Still Out of School*

Despite increases in access in the 1990s, the net enrollment rate at the primary level (about 88 percent in 2001) is far from universal, and growth in coverage barely exceeds population growth (MEN, 2002). Coverage reveals severe inequities to the detriment of the poorer sections of society and to the rural areas, where 70 percent of Colombians in absolute poverty live. Gross enrollment rates at the primary level exceed 100 percent (due to overage children in primary schools), but this masks the fact that 12 percent of this population, particularly the poor, do not attend school compared with about 9 percent for the rest of Latin America and 6 percent for countries in the lower-middle per capita income range. Only about 30 percent of children entering first grade finish basic education (grade 9), and dropout and repetition rates for primary school are significantly higher in rural areas and among the poor in general.

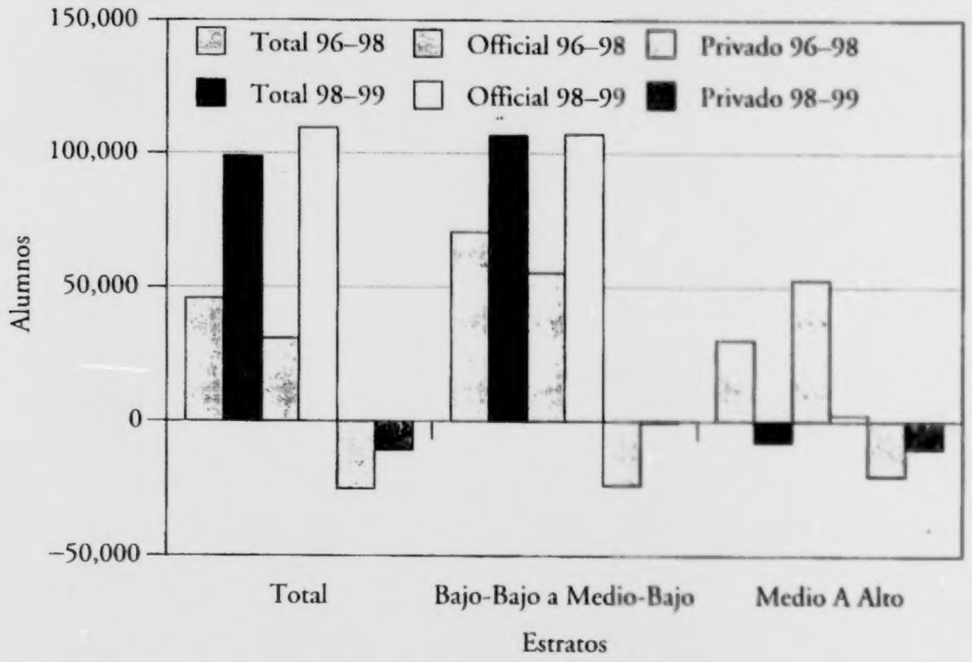
Since 1995 the enrollment growth in primary and secondary schools stagnated. During 1995–98, the overall enrollment increased for medium-low and low-income groups, whereas in private primary schools the enrollments for the high-income groups fell. Students from these families moved in great numbers to the public sector. There was a sustained increase in primary enrollment from 1996 to 1998. However, since 1997 (just before the beginning of the economic crisis in the country), data from Household Surveys indicate that there is evidence of a decrease in enrollment, especially of students from the bottom quintile. The public schools are absorbing part of the decline of the high-income groups participation from the private schools, while the lower-income students are dropping out (see Figure 1).

Reasons given for nonenrollment are the high opportunity costs of schooling, lack of money, and the need to work (Misión Social 1999, using data from 1997 when the crisis did not yet exist). Family income and the capacity to pay exert a great influence on enrollment.

### *c) Secondary Enrollment Trends: Coverage is Low Especially the Poor*

Secondary schooling in Colombia is characterized by low coverage, with about 54 percent of the school-age population enrolled nationally in 2001 (MEN, 2002). Less than 15 percent of the school-age population enrolled in the rural areas. Net enrollment in the basic secondary level (grade 6 to 9) is estimated at 52 percent and 26 percent in the upper secondary education level. The recent economic crisis appears to have badly affected the poorest income quintiles. It is notable that after the significant expansion in 1996 and 1997 of 265,000 students, 40,000 students dropped out in 1998. Increases in enrollment from the highest income quintile are accompanied by significant decreases in enrollments from the poorest quintiles 1 and 2. However, there is evidence that over 59,000 students have dropped out from quintile 4. Those who dropped out at the end of primary school are concentrated in the lower-income groups.

**Figure 1. Impact of the 1998–99 Crisis on Primary Enrollment**



### *d) Higher Education Trends: Very Low Coverage and Favors the Rich*

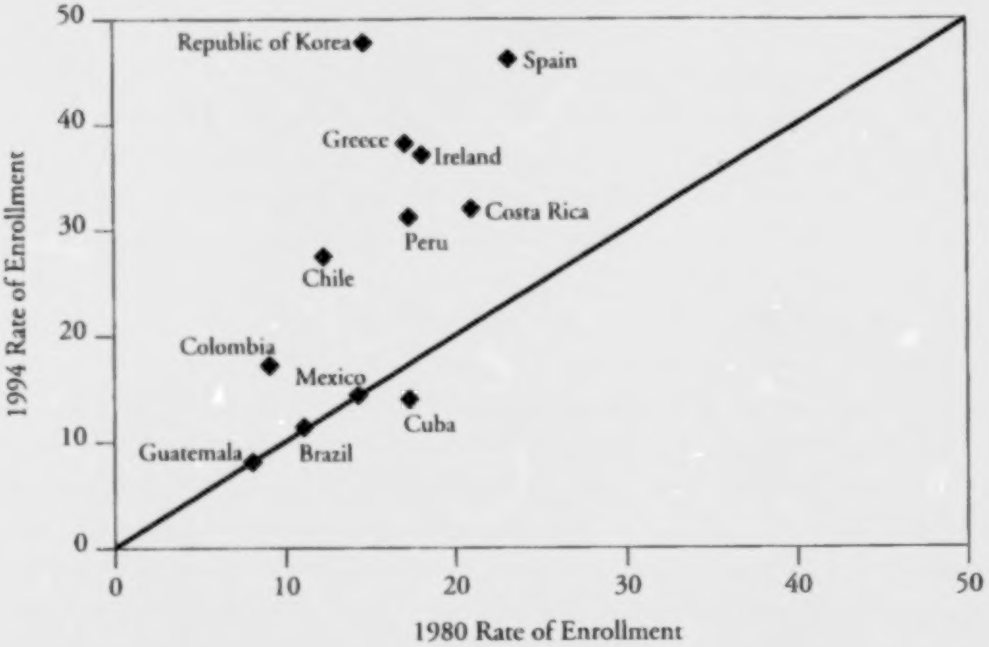
Enrollment rates in higher education institutions doubled from 1980 to 1994 (Figure 2), with an unparalleled growth in private institutions. Today about 65 percent of tertiary school students attend private educational institutions. This has been mainly because of the increases in the number of private institutions. In fact, this is the only educational level with an increase in private sector participation. However, coverage is still low—with about 15 percent of the age group enrolled in 2000 (compared with 21 percent in Chile and 27 percent in Argentina). Again, serious inequalities exist, with the majority of students in higher education coming from the upper two quintiles of income distribution. It is also significant that the universities are located within a geographically poor distribution in urban areas (50 percent of enrollments are located in Bogotá).

New universities have sprung up with limited teacher or pedagogic resources, resulting in poor quality of instruction. For example, only 2 percent of instructors hold doctoral degrees (compared with 25 percent in Brazil). Many programs offered at the tertiary level tend not to be adapted to the needs of the economy or labor market. Only 3 percent of tertiary enrollment are at the postgraduate level, compared to 10 to 15 percent in Organization for Economic Cooperation and Development (OECD) countries.

It is important to observe the rapidly declining enrollment in universities during the last three to four years, which can be attributed to the general economic situa-

8

**Figure 2. Higher Education Gross Enrollment in Selected Countries, 1980 and 1994**



*Source:* UNESCO (1998a).

tion in the country. Although data are not yet available on the emigration of families from Colombia because of violence or the threat of violence, this may be accompanied by student withdrawal and falling enrollments. This seems to be the case for both private and public institutions although, for economic reasons, dropout is affecting private universities more. For example, *La Universidad del Rosario*, a prestigious private university in Bogotá, reported a 25 percent drop in the number of students a couple of years ago.

## III. Policy Issues and Options in the Education Sector

Seven key issues in the Colombian education system are addressed in this section, namely:

- inequity in access to schooling
- low sector efficiency
- low and deteriorating quality of education
- weak links between education and labor demand

- poor public expenditure allocation within the sector
- weak decentralization and institutions at the local level; and
- the negative effects of civil conflict.

ISSUE 1: WIDENING EDUCATIONAL GAP BETWEEN RICH AND THE POOR. Disparities in educational attainment among the poorest, middle-income, and richest groups have increased over the last few years in Colombia, and there are indications that the gap between the richer and poorer income groups is widening. Colombia has a higher Gini coefficient (.444), than any other country in the region, such as Mexico (0.335) and Chile (0.254), and this mirrors the educational coverage that discriminates against the poor and rural areas of the country

In Colombia, the average number of years of formal education for people over 5 years of age, increased from 2.4 years in the mid-1960s to nearly 7 years in 1999. It took more than 20 years to double the educational level achieved—a significant but slow effort. Mexico has a better school achievement level, with about 8 years of education on average, and Argentina and Uruguay have even more, with more than 13 years of formal education.

The first push for rapid growth, with the creation of a fixed percentage of institutional resources directed to education, started in 1958. This initial improvement lasted until the mid-1980s. A second impulse started at the beginning of the 1990s, affecting the urban but not the rural sector. The pace of growth in the first 20 years was an average of one grade of education for 10 calendar years. In the last six years people in the urban sectors have gained one year of formal education, a good achievement that may not be sustained due to the current fiscal situation. The implication is that, if the historical tendency is maintained, the rural sector will continue to be more than 30 years behind in relation to the urban sector.

To compare achievements in equity, Sarmiento (2000) looked at the evolution over the last 10 years of average years of formal education by income decile for people over 5 years of age and for the Economically Active Population (EAP).[2] The difference in achievement between the first and last income decile is seven years. The richest 10 percent of the population have more than double the education of the poorest. The relative difference decreases until the fourth decile, and increases from there on, both for the population as a whole and for the EAP, which shows that education has been distributed more and more equitably in basic education and increasingly inequitably above this level. This difference widens between the 1980s and the 1990s, in absolute and relative terms, up to the fifth decile.

ISSUE 2: SECTOR EFFICIENCY IS POOR. The Colombian education system is characterized by high rates of failure at all grade levels, and particularly repetition in the first grades of primary education. Rural dropout rates are particularly high; in 1998 it was

---

[2] National Planning Department (*Departamento Nacional de Estadísticas*, DANE) household surveys, conducted in September of each year.

50 percent for fifth-grade students. Although the internal efficiency of the system is improving, some changes still need to be made. For three cohorts analyzed between the late 1970s and the late 1990s, retention at the primary level has increased from 47 out of 100 to 65 out of 100. The average time needed to complete primary education has decreased by 5 percent. However, even at the end of the 1990s, out of every 1,000 children between ages 7 and 11, 73 did not go to school (most from the poorest quintile), 650 finished primary school, but only 600 went to secondary school. Of these, only 360 finished secondary school. Today, in 2002 the number of school-age children and youth out of school has increased to 2.3 million.

The high repetition and drop out rate particularly in the lower primary levels are also due to the poor readiness of young children for schooling. The low coverage of early childhood development programs puts a majority of poor children at a disadvantage when enrolling in grade 1. Students with no preschool experience, and those who were malnourished and disadvantaged early years, are the children who experience high repetition and dropout rates at the primary level. This calls for the scaling up of early childhood interventions, to considerably increase the present coverage of 3–5 year old children from the present rate of only 37 percent.

ISSUE 3: POOR EDUCATION QUALITY AND LACK OF RELEVANCE. Despite large and increasing public expenditures on public education, empirical evidence based on the *Instituto Colombiano de Fomento para la Educación Superior* (ICFES) test suggests that quality is decreasing (the percentage of schools with low achievement has increased from 30 percent in the 1980s to 50 percent in the 1990s) and that quality of private schools is better and the difference widening, with a difference of about 3 standard points in favor of private schools in 1991 and almost 7 standard points in 1998. Out of the 186 schools in 1998 in the top decile of the test, 94 percent were private schools. The first public school comes out in place 15 and the next one in place 63.

Since 1991, the National Evaluation System for the Quality of Education (SABER) has administered achievement tests in mathematics, language, and science for students in grades 3, 5, 7, and 9. These tests have repeatedly shown that a majority of students in grades 3 and 5 of elementary school have an academic level below that of their age level. The performance of Colombian students on the recent UNESCO/OREALC assessment was broadly on a par with their counterparts in Brazil and Mexico, and in a median position when compared with other countries in the region (Statistical Annex Table A.1). However, scores indicated a high level of disparity between the achievement of urban students and their rural counterparts, who scored consistently lower. Based on data from the same study, relative to other Latin American countries Colombia does much better in rural areas, mainly in math. Only Cuba does better. These results are due in part to the success of several effective pedagogical models, in particular *Escuela Nueva* (EN), to be described latter.

However, when compared with countries outside the region (Table 1), the performance of Colombian students in mathematics indicates that the standards of the region may be considerably lower. Colombia participated in the Third International

**Table 1. Average Math Achievement Test Scores of Eighth Graders, Selected Countries**

| *Country* | *Average Score* |
|---|---|
| Singapore | 643 |
| Korea | 607 |
| Ireland | 527 |
| Portugal | 454 |
| Colombia | 385 |
| South Africa | 354 |

*Source:* IEA (1996).

Math and Science Study (TIMSS) during 1994 and 1995. The study measured performance in mathematics and science against international standards among students in grade 7 and 8 in 40 countries. The results of the TIMSS indicate that there is a significant gap between curriculum content and actual learning of Colombian students. Although the syllabus content was on a par with that of most other countries, student performance in Colombia is significantly below the international mean, and students from private schools, on the whole, did better than students from public school.

National educational assessments indicate the inadequacy of both primary and secondary education. A national level assessment conducted in 1999, SABER/ ICFES, indicated the inadequacy of education standards, with students in rural areas of most departments consistently performing worse in achievement tests than those from urban areas, particularly in such tasks as knowledge application and problem solving in language and mathematics.

REASONS FOR COLOMBIA'S LOW EDUCATION QUALITY. Low educational quality in Colombia's basic and secondary education is due to both school-related factors and broader socioeconomic conditions, such as poverty. These include:

- POOR QUALITY OF TEACHERS. Although the proportion of teachers with a *Licenciatura* is increasing, and although there have been some good examples to improve the quality of teachers with pre- and in-service education and training, some key changes in the school have yet to happen. Teaching practices in the classroom, based on the frontal model (the method widely used by Colombian teachers outside of the *Escuela Nueva* and the accelerated models), have proved to be ineffective in increasing quality of education.[3]
- INADEQUATE PEDAGOGICAL SUPERVISION. One of the greatest problems facing Colombia's basic educations is the inefficient system of teacher supervision. This applies to both technical–pedagogical supervision and administrative oversight. This results in (a) teachers who receive little or no feedback on their teaching techniques and effectiveness, (b) high teacher absenteeism, and (c)

---

[3] The frontal model is the traditional way of teaching, with a teacher at a blackboard in front of the students, who are seated at desks that are arranged in rows. The teacher speaks (lectures) to the students while writing on the blackboard, repeating what is already in the textbooks, and the students repeat what is being written on the blackboard.

an important disconnect between what the curriculum defines and the actual teaching that goes on in the classroom. Weak supervision is partly due to a lack of funds with which to hire and mobilize supervisors, and partly to the lack of involvement of parents and community in the education process.

- NEED FOR CURRICULUM REFORM. Colombia is moving in a positive direction in producing a more relevant curriculum and making it more flexible, particularly in accommodating people's views on priorities. A basic problem, however, is the need to expand active learning in the curriculum, changing the teachers' traditional role as sources of knowledge (together with the textbooks) and custodial controller of students, to one where they play a role of facilitator, ensuring that written instructions are understood, motivating students to do extra work, counseling students with problems, helping students learn through cooperative learning interaction (group work), using peers to facilitate teaching, and increasing self-determination. The *Escuela Nueva* model follows this active learning approach, which also incorporates in a much more practical way local content and community information. The implementation of the model could be expanded to schools where it is not in use, and this could contribute to the improvement of quality by strengthening its student-centered curriculum, by using detailed self-instructional guides, and by establishing a student government body to develop civic and democratic values, stimulate leadership and organizational skills, and involve students in school management. In addition, in spite of curriculum-related improvements, it is also necessary to make use of more modern multicultural approaches, and especially to concentrate on indigenous and Afro-Colombian groups, where little has been achieved.
- POOR QUALITY OF SCHOOL ENVIRONMENT. Factors that determine the quality of the school environment include textbooks, school infrastructure, teaching materials, and experimental science facilities. Although Colombia has made some effort to produce and distribute textbooks in an efficient way, with the strong collaboration of the private sector, the quality of textbooks needs improvement. *Escuela Nueva* student guides can be improved too. Unfortunately an effort to publish a revised version of these guides, undertaken a couple of years ago, did not result in improvements.
- INEFFECTIVE ASSESSMENT SYSTEM. It is necessary to further use the results from the standard education assessment, SABER, for policymaking. They have been applied in most Departments but have not been properly used to provide feedback to policymakers. It is necessary to establish a quality assurance system, with established benchmarks. Establishing clear standards for what students should learn by the end of various levels and with different modalities of education, and standards for teacher qualifications and development is something that will be beneficial not only to monitor quality, but also to facilitate effective decentralization. In addition, results from this assessment need to be disseminated to keep parents and the community at large informed about educational achievement of the system.

- TEACHER ABSENTEEISM AND USE OF TIME. There are several problems with time on task in Colombia. One is the actual number of days and hours a day the teacher is present in the school. Anecdotal but systematic evidence indicates that this is a serious problem mainly in rural and urban marginal areas. Some researchers have estimated the number of teacher absentee days in rural areas to be half of the prescribed days. Another problem is that a great amount of time is spent organizing the group and in mechanical repetition exercises, with little pedagogical value. In some rural areas affected by the armed conflict attendance is a major issue.

ISSUE 4: WEAK LINK BETWEEN COLOMBIA'S EDUCATION SYSTEM TO LABOR MARKET DEMAND. One concern of education policymakers is the linkage between the educational system and the labor force, specifically the correspondence between the education system's output and the demand for educated labor. Economic growth and productivity are enhanced if the abilities of all citizens are fully developed and used in the most productive occupations possible. The Colombian education system needs to improve to properly develop human resources into employable citizens with the skills to engage in productive sectors of the economy in an efficient way. The system needs to improve the development of cognitive skills to increase the income-earning potential of its citizens. The educational structure of the labor force has improved, and the expansion of secondary and higher education has meant an increase in the proportion of the labor force with more education. Analysis of the household surveys demonstrates an increase in the educational levels of the labor force. The average years of education of the economically active population grew from 6.5 in 1991 to 7.3 in 1997 (Table 2). This is a slightly lower increase than that of the educational average between 1978 and 1991.

Since 1970, however, the overall rate of return for an additional year of education in Colombia has declined from about 16.7 percent in 1971 to a still relatively good 12 percent in the 1990s. This signifies a troubling trend of weakening links between the education and the labor market, despite the relatively good returns to education as a whole. The links are much lower in the rural areas. Sarmiento's findings (2000) indicate that in rural areas the returns to education are significantly lower than in urban areas, and without a clear trend of change during 1991–97. Likewise, the profitability of experience is lower in rural areas.

ISSUE 5: FINANCING OF EDUCATION IN COLOMBIA: PUBLIC EXPENDITURE INEFFICIENCIES AND CONTRIBUTIONS FROM HOUSEHOLDS. Colombia has a very strong priority for education and this is reflected in the high and increasing share of education as a proportion of the GDP. Between 1973 and 1997 total social spending (for education, health and social welfare) in Colombia increased fivefold in real terms. This increase was particularly high in the 1990s, with continuous growth since 1991. Public spending on education quadrupled in real terms over that period, while the school-age population (aged 5 to 25) grew by only 30 percent. Unit cost grew most

14

Table 2. Average Years of Education by Income Decile, 1991–97

| | National Total | | | | Urban Zone | | | | Rural Zone | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *Deciles* | *1991* | *1993* | *1995* | *1997* | *1991* | *1993* | *1995* | *1997* | *1991* | *1993* | *1995* | *1997* |
| 1 | 3.6 | 3.4 | 3.8 | 3.8 | 4.8 | 4.7 | 5.1 | 5.5 | 3.2 | 3.2 | 3.3 | 3.3 |
| 2 | 4.1 | 3.7 | 4.2 | 4.4 | 5.6 | 5.5 | 5.7 | 5.9 | 3.1 | 2.9 | 3.4 | 3.3 |
| 3 | 4.6 | 4.4 | 4.6 | 4.9 | 6.0 | 6.1 | 6.1 | 6.4 | 3.4 | 3.2 | 3.6 | 3.3 |
| 4 | 5.2 | 4.9 | 5.1 | 5.6 | 6.3 | 6.5 | 6.7 | 6.8 | 3.5 | 3.6 | 3.7 | 3.7 |
| 5 | 5.5 | 5.3 | 5.6 | 6.0 | 6.7 | 6.8 | 6.9 | 7.2 | 3.3 | 3.4 | 3.8 | 3.7 |
| 6 | 6.1 | 5.7 | 6.0 | 6.6 | 7.0 | 7.3 | 7.4 | 7.6 | 3.6 | 4.0 | 3.9 | 3.7 |
| 7 | 6.4 | 6.3 | 6.7 | 7.2 | 7.8 | 7.8 | 7.9 | 8.3 | 3.9 | 3.9 | 4.0 | 3.8 |
| 8 | 7.4 | 7.3 | 7.4 | 8.0 | 8.4 | 8.6 | 8.7 | 8.9 | 4.1 | 4.1 | 4.3 | 4.1 |
| 9 | 8.4 | 8.5 | 8.6 | 9.3 | 9.1 | 9.5 | 9.6 | 10.0 | 4.3 | 4.3 | 4.4 | 4.3 |
| 10 | 9.9 | 10.2 | 10.5 | 11.3 | 10.7 | 11.0 | 11.3 | 11.6 | 4.8 | 5.2 | 5.3 | 5.3 |
| Total | 6.1 | 6.0 | 6.3 | 6.7 | 7.2 | 7.4 | 7.5 | 7.8 | 3.7 | 3.8 | 4.0 | 3.9 |

*Source:* Sarmiento (2000) based on DANE, National Household Surveys.

rapidly in the 1990s, from 62,000 Colombian Pesos at the beginning of the decade to 128,000, about US$127 in constant prices. This differs from the experience in most Latin American countries, where it decreased during the period.

Currently, however, the country is going through a difficult economic situation, which will make it impossible to maintain this trend. In fact, public spending started to decrease in 1998. Public spending on education had reached 3.7 percent of GDP in 1984, but started to decrease beginning with the economic adjustment of 1985, reaching 3.1 percent in 1991, the lowest participation since 1979. Since 1991, as an effect of the support of social spending provided by the 1991 Constitution, it reached 5.7 percent in 1996. If we add to this percentage the 4.2 percent from private spending, the resulting percentage is above the average for Latin America.

As a proportion of all government expenditures, education accounted for 11.1 percent in 1989 but reached only 13.6 percent in 1996, far from the 21 percent in the first half of the 1970s. This is because government spending increased considerably in recent years and the increase was mainly in health and social security.

Inefficiencies in expenditures have been observed. An analysis of the structure of expenditures in education by level (primary, secondary, and higher education), shows that in the last 20 years the expenditure that grew most was on administration overhead, moving from 0.2 to 0.83 percent of GDP. Until 1995, higher education was the level with the highest growth at 447 percent compared to a growth of 352 percent for the primary education level, it is worrisome that it was expenditures for administration that grew the most. Expenditures for primary education decreased the most as a result of the adjustment of 1984. Its financing in constant pesos diminished from 1983 to 1986, but then recovered. In the last five years it doubled in constant terms and as a percentage of GDP. Expenditures on secondary education grew the least, but since 1992 they have doubled.

Public expenditures on education had for the most part been progressive in the primary education sub-sector, but highly regressive in the higher education levels. Sarmiento and Caro (1998) analyzed public spending per student by income level and found that for 1997 spending at the primary level clearly favored the poorest 50 percent of the population in both the urban and rural sectors. The growth of the expenditure on secondary education during was clearly redistribute, especially in the rural sector. In terms of impact, the rural primary and secondary expenditure represents 40 percent of the real income of the poorest 10 percent of families, both rural and urban. For the second decile, it represents 18 percent in the urban zone and somewhat more than 50 percent in the rural zone, while this proportion is less than 4 percent for families above the fifth income decile.

The cost of primary education has increased relatively more than the cost of secondary education. Between 1985 and 1997, the cost per student in primary school rose by 145 percent in real terms, while at the secondary level it rose by only 39 percent. This higher cost is due to the unification of primary and secondary teacher pay scales, and to the increase in access to post-secondary education and training, which raised teacher salaries. The efficiency of the sector measured by average cost has improved notably for the secondary level and somewhat for the primary level. Over this 16-year period the time needed to graduate primary school has been reduced by about 1.6 percent. The system is more expensive and only a little more efficient. At least 15 percent of the additional cost is due to a decrease in the student–teacher ratio.

Public spending on education is distributed in a progressive manner; that is, the lower-income groups receive the largest part of public expenditures, especially at the primary level. In the case of higher education the distribution is regressive—expenditures are concentrated in the higher-income quintiles. Only 12 percent of the poorest 40 percent attend a university, and 60 percent of those attend private universities where they pay for their education. In addition, more than 40 percent of those who belong to the highest quintiles go to public institutions, even though they could pay the tuition of a private institution.

HOUSEHOLD EXPENDITURES FOR EDUCATION. As part of the analysis of education financing, it is also important to review the structure of family spending on education, including the related payments that a family makes—not only the fees, but also other expenses such as textbooks, uniforms, and transportation. Urban families, on average, spend about one fifth of their income on education. The most important item is for tuition and fees, which account for 51 percent of total expenses when universities are included and 30 percent when they are not. In relative terms, the middle-income levels make the largest expenditures for fees, since they tend to finance private secondary education. Although the children of the poorest 20 percent of the population usually go to public schools when they go to school at all, they must pay amounts which do not appear to be important in absolute terms but which represent close to 40 percent of their monthly expenses.

Spending for universities (tuition, graduation fees, and subsistence) is another large expense for the highest-income deciles. Families in the lower four deciles dedicate only between 3.8 and 7.3 percent of their expenditures to university, compared to between 27 and 46 percent for the highest four deciles (Statistical Annex Table A.2).

The percentage of expenses that low-income families dedicate to school supplies (textbooks, notebooks, and stationery articles in general) is high, representing 8 percent for the richest decile and 40 percent for the poorest. The poorest 20 percent of the population spend 53 percent of their education budget on supplies and uniforms, while the richest spend only 12 percent. The policy implication is clear: for poor families free tuition is not enough because spending for such things as notebooks and textbooks is very high.

In the aggregate for the whole country, family spending represents about 4.3 percent of GDP, which means that families dedicate to education a percentage very similar to the State's expenditure. These are very significant private investments.

ISSUE 6: DECENTRALIZATION: GOVERNANCE IS WEAK, INEFFICIENT, AND INEQUITABLE. By decentralizing the educational system, the government made the argument for

17

increasing local resource mobilization, cost sharing, and greater community and parental involvement in education. The 1991 Constitution set out to redirect the actions of the state to serve the community more promptly and efficiently and sought to create a culture of results-oriented public sector management. With respect to education, the Constitution increased local responsibility for the delivery of quality education programs and distributed administrative functions at different levels.

The decentralization process had limited success and there has been a wide gap between intentions and actions, with continued weaknesses in the social sector ministries (including a high turnover at the ministerial level, an overly complex budgeting process that generates perverse incentives, inadequacies of the national cofinancing system affecting the flow of external loans to the local entities, and confusion concerning the different responsibilities of each level in the system.

An overriding concern has been to ensure that decentralization is developed within a sustainable fiscal framework. Fiscal reform trailed behind decentralization developments with the effect of impeding these developments. The cofinancing system was overly centralized and bureaucratic, with the delays in the transfer of funds to the local level blamed on the lack of capacity for planning and budgeting at the local level. To a large extent this is true in that the government has concentrated on financial and administrative reforms without sufficiently strengthening local capacity at the Department, Municipal, and institutional levels. Moreover, financial transfers to local levels tend to favor the richer municipalities with, for example, surplus teachers in richer municipalities while, at the same time, there is a lack of teachers in the poorer, especially rural, areas.

Clearly, the central government has a role in ensuring a more equitable distribution of these resources in the sector. The role of Departments is ambiguous in this system and there is little will or responsibility to redress these inequities at the Municipal level. A considerable amount of technical assistance will be necessary to assist in building the capacity for management and planning at the municipal and institutional level.

From the point of view of public spending, the contribution of the 1991 Constitution is the obligation to transfer resources to the Departments and Municipalities, leaving the initiative for spending to them. The transition to this form of transfer was made in a very short time, generating all kinds of management problems and, at the end of the day, increased levels of regional indebtedness. This has meant serious fiscal difficulties for a large portion of the departmental and municipal entities. This needs to be corrected and recent legislation has moved in the right direction (Law 715).

The fiscal decentralization, expenditures at the territorial level since 1991grew by 323 percent, municipal expenditures multiplied almost 10 times, departmental expenditures 6 times, and national expenditures also increased significantly.

The decentralization of management and operation of educational service delivery has been a clear achievement since the 1991 Constitution. It has most clearly affected the role of the municipality. However, evidence on the way this spending is done raises doubts about the quality of the fiscal management of several of these departments and municipalities.

The attempt to achieve more than one policy objective with the same instrument can be seen in what has occurred in the distribution of transfers in recent years. Even though the Constitutional reform was done in 1991, the initial effect has been very large in the allocation of transfers since 1994, because the formula for distribution is applied gradually to a growing part of expenditures.

The problem with the formula is that it tries to have the greatest percentage of resources distributed by a poverty indicator, but seeks to have this corrected at the same time by administrative efficiency and by fiscal efficiency and effort. The intent is laudable because it tries to avoid fiscal laziness and reward the most efficient. What experience has shown, however, is that in a given year these objectives can be contradictory.

When the Departments are placed in order of the Quality of Life Index, where those with the highest indexes are the richest and are compared with the national average, it is seen that the effect of the formula clearly favors some departments. Departments from the Atlantic coast and Cauca, Huila, Meta, and Narino are discriminated against.

CHANGING ROLES OF THE MINISTRY OF EDUCATION (MEN) IN DECENTRALIZATION. Lack of clarity in the roles between the center and regions began to emerge in the process of decentralization. The problem of distribution of resources is due not only to the unwillingness of the central level to change, but also to the fact that authorities from Municipalities and Departments expect the central level to solve their financial problems. Law 715 is a positive way to deal with the issue. Another related problem is that MEN staff has not been prepared to accommodate to their new functions, and frequent turnover is a big problem. In the past decade a new minister was appointed every nine months, a period too short to absorb and adjust to the demands of the sector. These changes are also reflected in changes of key technical personnel, making difficult if not impossible the development of the technical capacity to advise and evaluate the territorial entities. Consequently, key but low-level staff prefers to continue doing their traditional jobs.

Clearly, one of the major limitations to adequate decisionmaking is access to valid information. For years the MEN has struggled to develop an efficient Education Management Information System, but the traditional annual census (introduced by UNESCO in the majority of Latin American countries) is inadequate. It is necessary to encourage development of systems for the evaluation of management; ways of using the standardized quality evaluation systems, which already exist but which have not been regularized or used for administrative and planning purposes; and the precise and continual measurement of costs. In this area it is necessary to overcome the sector's traditional mistrust of quantitative measurement and the erroneous attempt to replace it with a set of unsystematic opinions which are defended with the strange argument that qualitative observation conflicts with the quantitative.

Further, lack of accountability has been replaced by allowing the opinions of the authorities to predominate over fact. This is clearly reflected in the resistance of teacher organizations to evaluations. The most undesirable effect of this lack of accountability is the difficulty in getting the communities (parents, students, and nonschool institutions) involved in school management and education matters.

ISSUE 7: INTERNAL CONFLICT, VIOLENCE, AND SOCIAL DISPLACEMENT: NEGATIVE IMPACT ON SCHOOLING. The lack of educational and employment opportunities has been cited as one of the main contributing factors to the burgeoning crime rate and to violence among Colombian youth. A 1994 World Bank study attributed this to the limitations on the availability and quality of primary and secondary education. More education will lead to reduced violence only if it also leads to increased employment. Underresourced schools in rural areas offer few incentives for youth, many of which turn to the guerillas as their sole source of employment (World Bank 1999). Drug traffickers shrewdly recruit the more successful secondary school students, who know only too well that employment opportunities are negligible in the poorer neighborhoods. Leading Colombian experts on child abuse believe that abusive childrearing practices are responsible for the transmission of trauma, and that the growth of a subculture of violence through the socialization process and the interpersonal relationships of individuals living in similar conditions, convey the message that violence is acceptable, normal, and necessary.

National homicide rates during 1980–95 for males aged 14 to 44 increased from 167 to 394 homicides per 100,000 (an increase of 136 percent). An extremely high proportion of perpetrators and victims of urban crime are minors. Internal displacement, a result mainly of the armed conflict, affects mainly females (58 percent) and those under 25 years of age (75 percent), and disproportionately affects indigenous groups.

Violence in Colombia has been identified as a key development constraint affecting macro- and microeconomic growth and productivity, and reducing the government's capacity to reduce poverty, inequality, and the exclusion experienced by the majority of its population in both urban and rural areas. The 1999 World Bank study on violence shows that the level of violence has increased dramatically since 1985. Less than 20 percent of homicides are categorized as "political" and attributed to the paramilitary, guerilla, and army. The remaining 80 percent of nonpolitical homicides are the result of economic violence, both organized crime (related to drug trafficking and organized kidnapping) and unorganized delinquency (including robberies, carjacking, and kidnappings), and social (interpersonal) violence, particularly related to alcohol, drugs, or handgun-related deaths.

Violence has had the effect of limiting access to educational facilities by both students and teachers. Death threats to and killing of rural teachers by guerilla and paramilitary forces have resulted in the abandoning of schools across the country. There is also considerable evidence that family conflicts or scandals, presence of gangs, neighborhood drug abuse, and prostitution have a strong influence on the school dropout rate. In the violence-prone zones, teachers are regularly subjected to intimidation or violence, students are not able to pass through guerilla, paramilitary, or gang-controlled areas, and the violence results in the physical destruction of school property.

The number of internally displaced people in Colombia has increased over the last decade because of the high incidence of violence among the army, guerillas, and paramilitary groups. It is uncertain whether the displaced will return to their rural communities. Therefore, services such as housing, social welfare, and employment opportunities will remain overstretched in the urban areas to which these people migrate. The challenge facing the education sector is to develop an emergency response to the huge increase in population in urban areas caused by displaced families who have abandoned schools across the country.

## IV. Government Strategy: Addressing Education Sector Issues

In the last decade, the Colombian government has placed an emphasis on social sector development as reflected in the National Development Plan of the last two Administrations. Many of the specific priorities clearly responded to the main education sector issues laid out in the previous chapter.

Government priorities included (a) the development of human capital with a focus on universal coverage and better quality of education and health, (b) improved coverage and quality of secondary education, (c) increased competition among service providers and freedom of choice to consumers in the choice of schools, (d) greater private sector involvement in the social sector, and (e) support for well-targeted programs aimed at reducing poverty and rectifying inequities.

### *a) Programs and Policies Responding to Issues of Educational Access and Equity*

Among the programs that have produced important lessons and present opportunities for improvements in the sector are the following.

INTERVENTIONS FOR POSITIVE DISCRIMINATION AND INCLUSION. Starting with the 1991 Constitution, an important goal of the educational system has been redistribution of expenditures in favor of the poorest. This, however, presents a challenge to assuring changes in current expenditure. Management of the education sector becomes a key element in the efficient use of new available resources. It is necessary to create or find personnel with skills to lead the effective management of current expenditures. Universal access to basic education is an essential element to help the country achieve a higher level of development.

In the 1990s program instruments affecting current expenditures provided were advanced, including: (a) stability in public financing for basic education; (b) reorientation of national transfers toward the poor in a decentralized framework; (c) implementation of the *Nueva Escuela* and other innovative programs, as quality intervention aimed at the poorest; (d) a set of instruments and programs, still being evaluated, which tries to involve civil society in the management of public education, like the concession program in Bogotá (private administration of public institutions); and (e) some form of voucher, like the *Programa de Ampliación de la Cobertura y Mejoramiento de la Calidad de la Educación Secundaria y Media* (Program to Improve Access and Quality in Lower and Upper Secondary Education, PACES) grants at the national level or the fellowships program in Bogotá.

DEMAND-SIDE FINANCING: THE PACES SCHOOL VOUCHERS. In 1992 the Ministry of Education and DANE initiated a grant program called the *Programa de Ampliación de la Cobertura y Mejoramiento de la Calidad de la Educación Secundaria y Media* (Program to Improve Access and Quality in Lower and Upper Secondary Education, PACES), to allow poor students to pursue their studies in grades 6 to 11. In 1997 this program reached a total of 216 municipalities (out of about 1,200 in the country), and about 90,000 students in more than 1,800 private schools participated in the program. The majority of participating schools were in urban areas, where private schools are concentrated. Fifty-five percent of the students with grants and 62 percent of the participating schools were from the 10 largest municipalities.

The program had its widest coverage in 1995. It has declined and now is applied only in selected municipalities. The decline is explained by the declining political support for the program as a consequence of the change of mayors in 1996. An evaluation (see Angrist and others 2000) showed that voucher recipients had higher educational attainment and that only a minority of the voucher value substituted for educational expenditures families would have undertaken in any case.

By income quintile there is a more progressive distribution for public than for private aid. Some 50 percent of aid from public agencies goes to the poorest 40 percent of the population, while this group receives only 30 percent of private aid. The richest 40 percent still receive 23 percent of public aid, indicating that there is still room for better targeting of state subsidies.

EXPERIMENTAL GOVERNMENT PROGRAMS TO INCREASE EDUCATION ACCESS OF THE POOR. Some other programs of positive discrimination, which have not yet been evaluated, are indicative of the efforts made by the MEN and other entities to find effective ways to improve access to quality education by the poor. Among these the government is piloting the following programs:

- ACCELERATED SCHOOLS. Their objective is to attack the issue of overage children (that is, children who are older than average or usual age for grade) in Colombia by developing a pedagogical model characterized by a student-centered approach, with independent work and special educational material inducing reading, problem solving, and learning by doing, to cover all five grades of primary education. The model is an adaptation of a successful Brazilian model.

- SISTEMA DE APRENDIZAJE TUTORIAL (SAT). The objective of this program is to expand secondary and middle education in rural areas based on a local curriculum, including improvement of the following skills: numeracy and calculation, scientific thinking, communication, and technology, and promoting community service.
- POSTPRIMARIA RURAL. This program closely follows the principles of the *Escuela Nueva*, which include active, flexible pedagogy to accommodate the needs of rural students.
- TELESECUNDARIA. The models replicate the Mexican experience, a cost-effective approach to expand access to secondary education in rural areas in Colombia.

Other programs include the additional day, which is applied in the context of the educational development plans supported in the schools since 1998. This additional day facilitates access for students in the poorest public and private schools to extracurricular activities, including cultural and recreational ones such as theater, sports, and music, and to informational and interactive media such as libraries, the Internet, and lectures. In this way poor students have access to educational inputs that improve educational achievement.

Another activity is designated administration or peer assistance. A program is being implemented in several cities to give schools with administrative problems support in improving management. This support is provided by schools of accepted excellence or by nongovernmental organizations of recognized experience, such as *Fe y Alegría* and the *Fundación Carvajal*, or private sector entrepreneurs interested in education. In some cases the municipality contracts these advisors, while in other cases an individual firm "adopts" a school, and in others an organization makes a commitment to manage one or several public schools.

### *b) Programs and Policies Responding to Problems of Quality and Sector Efficiency*

In the area of instruments of positive discrimination with generalized effects, the *Escuela Nueva* model should also be mentioned as an opportunity for efficient investment. This educational model has favored basic education in the rural sector, especially among the poor. Rural education is characterized by (a) high repetition and dropout rates due in part to the dispersion of the population and the inadequacy of traditional pedagogical models; (b) difficulties in keeping children in school all year because of the propensity of parents to use them in seasonal production and harvesting work; (c) deficient training of teachers to accommodate the curriculum to rural areas; (d) frequent absence of teachers who must travel long distances from the school to receive their salaries, get certified, or be trained; and (e) lack of parental involvement. *Escuela Nueva* was consolidated as a model for resolving these problems in an economically sustainable and pedagogically efficient manner. It has the advantage of the unitary school of offering up to all grades, but it does so with modern, semi-individualized methods which let the teacher guide the learning process by groups at the pace that the children learn, breaking the rigid scheme that has traditionally been used. The combination of the use of group and individual methods allows the students to go at their own pace. The model is also flexible regarding attendance, allowing students to work or otherwise help their parents and return to their studies when they have the time. The school has guides for teachers and students that unify the content of learning, provide a pedagogical guide to teachers and students, and indicate the moment for teacher intervention, private study, group discussions, and use of support materials.

In addition, *Escuela Nueva* has developed forms of interaction which, while making the children more responsible for their own education, also support their participation in the organization and management of the school. It has gained the support of parents because they can participate in both the way the school is organized and in the production of support materials. The educational microcenters also allow teachers to exchange experiences and solutions, thus becoming an efficient method of in-service training.

More than each particular element, what is important about *Escuela Nueva* (EN) is the synergism of all the factors (see Box 2). Based on the results obtained in systematic evaluations, we believe this is a desirable model for the entire rural sector, and even the urban marginal sector. The design of the program and the location of the schools clearly have had a positive effect on the poor. Evaluations (Psacharopoulos, Rojas, and Velez 1992; McEwan 1995), various tests conducted by SABER (Misión Social 1999), and efficiency studies and analysis by the Latin American Quality in Education Laboratory (UNESCO/OREALC 1998) have all found that the EN model has improved the quality of education of the poor. EN students achieve better results in learning, self-esteem, creativity, and in the formation of democratic values, and are more likely to remain in the system, and there have been significant effects of the model on activities such as agricultural extension and sanitation campaigns (Rojas and Castillo 1998). In terms of standardized tests, the 1997 study found top achievements in language and very similar achievements in mathematics. The UNESCO study found that Colombian students in rural areas score higher than students from Argentina, Brazil, and Chile. The model also increases parental participation.

### *c) Programs Addressing Effectiveness of Decentralization*

TRANSFERRING RESOURCES TO THE POOREST DEPARTMENTS AND MUNICIPALITIES. The reorientation of national transfers toward the poorest Departments and Municipalities has been the most important instrument of positive discrimination as part of the decentralization process in the 1990 because it has strongly affected the way in which current expenditures on education are made. The main characteristics of this form of intervention are (a) the stability of sector financing, (b) the clear objec-

**Box 2. Colombia's Escuela Nueva: A Tested Strategy for Reaching the Rural Poor and Improving Quality**

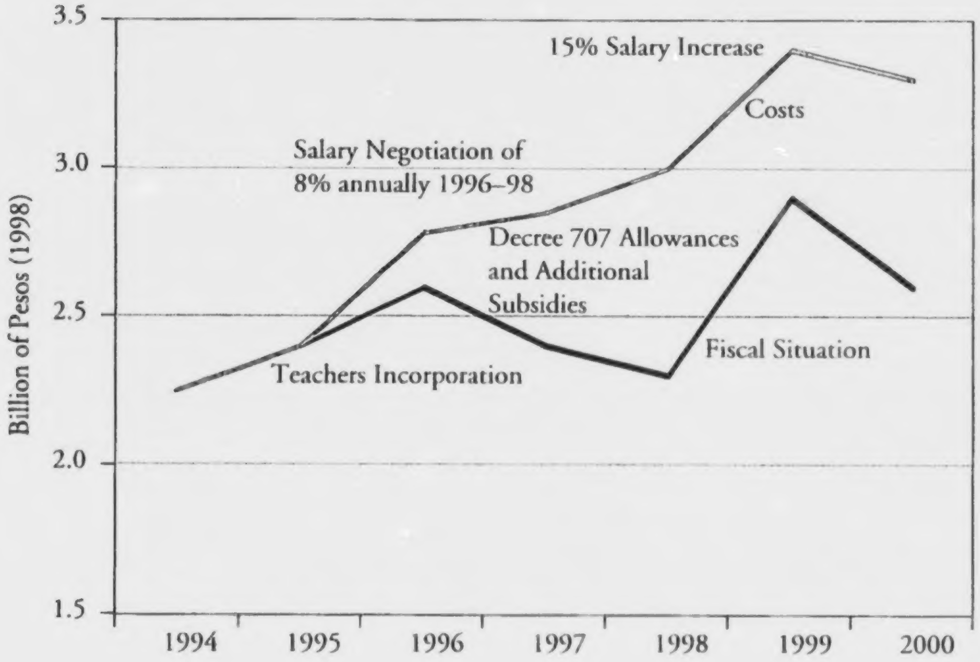
Based on its study detailing major weaknesses in the provision of rural basic education, the government of Colombia gave top priority to rural education and produced a 10-year rural education program, which built heavily on the *Escuela Nueva* (EN) program. EN was created in 1976 after a decade of experimentation and has been supported at various times by UNICEF, USAID, the IDB, and the World Bank. By 1978 more than 500 schools were involved, and this gradually expanded under World Bank financing to 17,948 schools by 1989, serving 800,000 students. Major characteristics of EN include (a) one or two teachers offering all five years of primary education in one or two multigrade classrooms; (b) flexible promotion, special instructional materials for individual and group work, and teacher guides; (c) curriculums relevant to the rural community; (d) school government to ensure participation of students, parents, and community; (e) study corners and class libraries; and (f) self-monitoring mechanisms for students. Rojas and Castillo (1988), Psacharopoulos, Rojas, and Veléz (1992), and McEwan (1995), have found that EN schools had significantly improved student outcomes, reduced dropout rates among the rural poor, and student and community participation as measured by activities such as adult education, agricultural extension, athletic competitions, health campaigns, and community celebrations. Social self-esteem and civic behavior were higher in EN schools than in traditional schools. Moreover, EN schools have high benefits relative to cost (parent volunteerism reduces monetary outlays for building and construction and contributes to gains in student achievement).

Although over 60 percent of rural schools in Colombia have some form of the EN approach, the initiative has lost momentum. Commitment by the MEN has diminished considerably over the last few years amid skepticism about its sustainability in the poorest rural areas and its "top-down approach" in such areas as teacher development and curriculum design. The challenge facing EN is to be able to adapt itself to the rapidly changing realities of educational decentralization in rural areas.

tive of favoring the poorest (although more needs to be done), and (c) decentralization of its management and operations.

Figure 3 illustrates the expansion of the transfer programs and their volume of resources. It has been rapid and incremental, reflecting a series of decisions, many ad hoc and not planned in advance. Since 1996 the central government, in response to a deficit due to the increase in the number of teachers and their salaries, had to create the *Fondo Educativo Compensatorio* (FEC) with an amount equivalent to 1.1

**Figure 3. Fiscal Situation and Contributions, 1994–2000**



percent of central government current income. By 2000 it increased to represent 3.4 percent of central government current income. This continuous support from the central government—the government has picked up the cost year after year—has given the wrong signal to *Entidades Territoriales* (Territorial Entities), which keep hiring new teachers. Allocation of education transfers is driven by the supply of teachers, not the need for allocation of teachers to meet student education needs. Bogotá is trying a promising approach to correct this policy, and it should be monitored for its expected potential. For a detailed analysis of this problem see the Chapter on Intergovernmental Fiscal Relations.

## V. Conclusions and Policy Recommendations

The new Administration needs to find solutions to the problems described in Section 2 on Issues in the Education Sector. Perhaps the priority is improving student learning. This is evident from the low learning achievement scores of many students at all levels. Improving student learning is fundamental to the future of Colombia and its ability to fully take advantage of accelerating technological progress and global competition.

To meet these challenges, the country would have to develop their own vision and strategy based on institutional-level realities. Decentralization has given the

Departments and Municipalities responsibilities for the development of the basic education system and opportunities to accommodate to national norms and to try out new ways to improve quantitative and qualitative indicators.

Solution of the inequities in the system is another priority. Colombia needs to selectively expand accessibility at the initial, preschool and higher education levels, at the same time that efforts are made to reach pockets of population that traditionally have not benefit from public investment in basic and middle education levels. Demand side financing such as the PACES programs would be important in reaching those excluded from school participation. Investments in preschools and early childhood development will definitely improve the efficiency of the primary education system through its impact on readiness of children for schooling. Investments are also needed to expand the opportunities for those in the labor force, through Life Long Learning Programs which seek to invest in the skills and education of the labor force to better adapt to the rapid and technical changes which would reinforce the country's economic competitiveness will be important in the next years. Colombia would increasingly be integrated into the global knowledge economy, and the education system needs to prepare its students to adapt to such changes. Finally, the country will need to support the decentralization process by improving governance of the sector, providing guidance and supervision.

Specific program options to address demand and supply side constraints are presented in Table 3 addressing educational issues facing Colombia. Most of these options have already been tried in Colombia, which need to be scaled up selectively to achieve the goal of achieving universal education, and quality labor force to support the country's economic and social development.

Given the key issues outlined above and possible options to respond to the situation, in Annex I some suggestions for short-term and medium-to-long-term support are presented as topics to be taken into account to design future investment and research.

**Table 3. An Education Action Plan: Policy and Program Option Matrix**

| *Key Educational Issues* | *Options* |
|---|---|
| Inequity of coverage | Selectively target areas with poorest urban, poorest rural, indigenous, and Afro-Colombian populations to increase coverage at all education levels. Promote decentralized planning with community participation and more equitable transfer of resources to local entities. |
| Sector efficiency | Pilot education innovations, like telesecundaria, accelerated schools, and expand STA, postprimaria rural and other cost-effective models, mainly in rural areas but also in poor urban ones. Support for closing gaps in retention, and learning achievement between poor and nonpoor/rural and urban. Focus on learning. |
| Quality of education | Pilot education innovations, like telesecundaria, accelerated schools, and expand STA, postprimaria rural and other cost-effective models, mainly in rural areas but also in urban ones, and expand more cost-effective models. Establish National Evaluation System and development of school networks for teacher in-service training. Reform of teacher education (escuelas normales). Strengthen multicultural education. Focus on learning. |
| Education relevance | At least maintain levels of government expenditures. Support strengthening of student loan schemes. Promote life-long learning programs. |
| Resource allocation | Maintain present levels of government education expenditures while controlling administration expenditure and deal with pension issues (see Chapter on Pensions).<br>Finding alternative sources for middle and higher education financing.<br>Allocation of education of transfers driven by student education needs. |
| Inefficient decentralized system | Developing legal framework for clarification of roles, and programs to build capacity at all levels. Development of national monitoring system and management information system<br>Keep process of human resources rationalization. Improve governance of the sector. |
| Internal conflict and violence | Support Education for Peace initiative. Introduce and promote democratic values, tolerance , social cohesion and social participation in curricular activities. Networking with other countries in region on education for conflict prevention and resolution. Develop strategies for education in conflict/postconflict areas, offering Peace Scholarships, and citizenship training for adult population. |

# Annex I
# Possible Activities to be Implemented by the New Administration to Respond to Critical Education Sector Issues

## *a) Program Response to Educational Access Issue*

DEMAND-SIDE FINANCING INCENTIVES. Under the present economic crisis, support is needed on an emergency basis to prevent the dropout mainly of children from the poorest households (quintile 1) from the public school system (this is already supported by the *Familias en Acción* program). A high priority needs to be assigned to developing demand-side financing mechanisms in the form of conditional cash transfers to attract and retain children in school. Interventions to reduce the direct and indirect costs of education for the rural poor and for displaced populations in urban and peri-urban areas will need to be carefully targeted. Possible interventions could be subsidizing families for lost earnings (opportunity costs) through the provision of scholarships, and building on the experience of a flexible school calendar and school hours for seasonal work obligations, such as those in *Escuela Nueva.* Financial incentives could be given to parents to send children to school and to keep them there through the provision of allowances accumulated as the child transfers from one grade or level to another. The experience of the school voucher system for poor students to attend private (or privately administered) schools should be evaluated for this reason. Such interventions would be targeted particularly at the very poor and indigenous populations, and at Afro-Colombians, who have proved to be the most vulnerable in this time of macroeconomic crisis and whose participation and achievement in school is most affected. Financial incentives in the form of grants for school attendance, like the system that has been piloted in Bogotá in the last couple of years, should be introduced in more *Entidades Territoriales.* Schools will also need to be helped in terms of resources in order to cope with the influx of students transferring from private schools (mainly from urban areas). Management of schools following the concession model experiment in Bogotá should also be promoted to gain efficiencies. A study of the effectiveness of the school voucher scheme giving access of the poor to private schools, introduced under the PACES program, was positively evaluated and indicates that this scheme to secondary school students should be expanded and that it may be used to apply a similar scheme for basic education students.

HIGHER EDUCATION REFORM PROCESS. Support of the national initiative to introduce reforms in higher education institutes should be continued (see Chapter on Higher Education in this same volume for a detailed discussion). This would ensure that access to higher education is further extended to students of low-income families and rural youth; that management of these institutions becomes more efficient, transparent, and accountable; and that the quality of teaching and learning is substantially improved. Most important, new financial resources in the way of student loans should be identified and designed.

Benefit–incidence analysis shows that higher education consumes a relatively high proportion of public expenditures, while the basis of cost recovery is higher at this level. In addition, public spending at the higher education level is regressive—that is, it favors the wealthy, and enrollment is very low. Primary education investment is considerable and public spending at this level is pro-poor. As a result, it is recommended that a student loan and fellowship plan be designed to expand enrollment at the higher education level, while at the same time improving access to higher education for capable poor students.

BUILDING HUMAN CAPITAL IN UNDERSERVED AREAS. Mechanisms should be established for building "intellectual capital" in rural areas which conventional higher education institutes have not served. The adoption of the community college model offering programs that serve local communities has been considered during the national debate (*Sintegración*) on reforming higher education (see Box AI.1). Colombia already has an extensive network of university extension colleges, and the community colleges could perhaps be integrated with this model. A concern here, however, would be remaining faithful to the model of a community-managed facility rather than one governed by academia. Yet another concern that would have to be addressed would be the potential disparity in status between the proposed local community college and the existing university extension.

As a mechanism to build human capital in underserved areas, proven cost-effective models like the *Escuela Nueva* should be expanded. Currently, only about a third of rural schools are covered under this method, and it should be expanded gradually to cover rural isolated areas. Other innovations like SAT, *Telesecundaria*, and accelerated schools should also be evaluated to see if isolated communities and students can be reached. Studies must be conducted to identify cost-effective models at the early childhood development and preschool level with the same purpose.

### *b) Programs to Improve Quality of Education*

REFORMING TEACHER DEVELOPMENT PROGRAMS AND MEASURING TEACHER PERFORMANCE. Low standards of education have been closely linked with the inadequate training programs for teachers provided by the teacher training institutes—the *escuelas normales superiores* (normal schools) and the faculties of education. The following steps need to be taken to reform the teacher development system and to improve the quality of teaching:

- Teacher development programs (both in-service and preservice) should be made more relevant and practical, particularly for teaching in rural areas.

### Box AI.1 Applying the Community College Model to Colombia

Community colleges could give broad access to education and training opportunities in the country, enabling the education system to reach out to youth and adult populations that are currently not able to receive appropriate skills training or to gain access to higher education institutions, which are concentrated in the urban areas of the country. One major constraint in education has been the lack of "intellectual capital" in the towns and rural areas of the country, limiting social and economic development and discouraging good professionals with families, such as teachers, from serving in these areas for long periods.

The community colleges would provide a comprehensive range of courses, tailor-made for the communities within which they operate and catering to the specific economic, technological, and developmental needs of a given area. Courses, therefore, would cater to those needing literacy and numeracy classes; skills training; and a vehicle for entering the formal education system, such as university, business training, and leisure learning. A critical consideration would be developing mechanisms to maintain rigorous quality assurance in the design of the curriculum and support systems.

The community colleges would be public, comprehensive institutions offering general education, including academic transfer to other institutions of higher education; technical and vocational education training; and compensatory, remedial, and community education. As such, the community colleges would have their foundation in the community (local population, business, and the labor sector), and would respond to the needs of the community. These colleges would be established in collaboration with the community within which they were situated, and the community would be represented in the governance, administration, and management systems of the institutions, thus enabling communities to participate actively in the governing and decisionmaking process. Partnerships among those already providing service could be built into the community college structure to deliver adult basic education and training, further education and training, and some access to the higher education sector. The community college concept is also rooted in the principle of democratic, community decisionmaking processes, and in the belief that learners at different stages in the lifelong learning process learn together as a community. For such colleges to succeed, substantial financial resources would be essential, with funding coming from a variety of sources: government (central and state), the private sector, and communities. Sources of funding could include national or international donors, fundraising events or campaigns, existing government allocations, student fees, the community, and employer contributions.

- Closer linkages need to be made between the normal schools and the faculties.
- Quality assurance mechanisms need to be developed to measure the quality of teacher development programs and their impact on teacher performance and student outcomes.
- Evaluation of teacher performance (which features prominently in government policy) needs to be related to specific standards and the evaluation of the impact of teacher development institutes (this needs to be designed and implemented with the participation of teacher associations and unions).
- School networks, being piloted in the Pasto and Rural Education Projects, could be linked with the teacher training institutions to make preservice and in-service programs more responsive to the needs of the schools and teachers.
- Mechanisms need to be explored for linking teacher incentives and compensation to teacher performance.
- Education development plans of the teacher development institutions *(Acreditación Previa)* should be based on a specified profile of teacher competency and should be linked with the PEIs of the schools and those of the municipalities to ensure greater accountability and transparency.
- Teacher performance could be evaluated at at least three stages in a teacher's career: at recruitment, after preservice training, and after a period of teaching (five years, for example), in order to measure the effectiveness of preservice and in-service development programs.

Standards should be formulated for teacher development programs within the Faculties of Education and the *escuelas normales superior,* establishing quality assurance mechanisms together with all stakeholders (to include the participation of teachers and teacher associations and unions).

TELECOMMUNICATIONS AND DISTANCE EDUCATION. Because of the high incidence of violence, the need for rapid, affordable, accessible, and effective communications is critical. The learning needs of the rural poor are considerable, and it will take a long time for face-to-face learning processes to arrive in these areas. Modern information technologies would permit a vast array of learning resources to reach remote populations (see Box AI.2). The major universities, institutes, and nongovernmental organizations are interested in collaborating on distance education programs, and this can be seen as a mechanism for these institutions to increase student numbers at a time of falling enrollments due to economic constraints and security considerations. The marrying of telecommunications with the concept of community colleges, community learning and information centers, decentralized teacher training, and virtual education programs for youth and adults, would provide an effective strategy for addressing many of the education problems mentioned above.

**Box AI.2 Mexico's Telesecundaria: Increasing Access to Secondary Education for the Rural Poor**

*Telesecundaria* provides a combination of distance and onsite secondary education for grades seven to nine in rural areas of Mexico where schools or teachers are in short supply and education is of poor quality. Educational television programming is broadcast through EDUSAT, Mexico's educational broadcast system, and transmitted through Solidaridad 1, a government satellite, to 13,785 schools in two sessions daily. A school can be equipped and wired to receive *Telesecundaria* broadcasts for a total cost of US$2,000. Technical adaptations are made where necessary. For example, 10 percent of *Telesecundaria* schools use solar power. *Telesecundaria* schools are initiated at the request of local communities that demonstrate that 15 or more primary school graduates will participate and can identify a location for school facilities. The Mexican Ministry of Education then provides a teacher, a television set, a satellite dish, instructional programs, and textbooks. Today, 16 percent of secondary students in Mexico attend *Telesecundaria* programs instead of traditional or technical schools.

### *c) Program and Policy Response to Effective Decentralization*

LACK OF LOCAL ACCOUNTABILITY FOR MANAGEMENT OF EDUCATION RESOURCES. Central government financing has created a disincentive for local entities to take steps to achieve greater fiscal efficiency through innovation and local fiscal effort. It is widely recognized that there are serious inefficiencies in the allocation of resources in Colombia's public education system. These inefficiencies include the setting of teacher salaries and benefits by the central government, the generosity of the pension system for teachers, and the allocation of education resources to *Entidades Territoriales*. It is also widely mentioned that the expensive teacher force is in general ineffective in reaching academic goals. In fact, in spite of the tremendous effort on the part of the central government to improve teacher salaries, internal efficiency indicators have not changed since before 1994. Although policy recommendations on these topics are included in the Chapters of Pension Reform and on Intergovernmental Fiscal Relations, it must be mentioned that it is necessary to revise current transfer formulas to avoid a bias in favor of the *Entidades Territoriales* with better *Indices de Calidad de Vida* (Quality of Life Indicators, ICVs).

CAPACITY BUILDING AT ALL DECENTRALIZED MANAGEMENT LEVELS. The impact of institutional strengthening will be measured in terms of more equitable distribution of resources in the form of funding and teacher supply and, ultimately, in the improvement in learning outcomes among the poorest sections of the country. To support this process it is critical that the MEN change its role from policymaking and control to one of knowledge management, evaluation, and supervision. Priority should be given to the definition of clear responsibilities *(competencias)* at each level for the financing and management of human resources in the sector. We recommend as a priority the implementation of a human resources census to rationalize use of available resources. Some exercises have already been conducted on a sample basis in most *Entidades Territoriales*. As a consequence of conducting a census to rationalize human resources, Bogotá in particular is realizing some savings (about 10 percent of the payroll). This exercise will permit identifying possibilities for amalgamation of groups and schools, streamlining of academic work for teachers, application of Decree 3011/96 (full-time teachers), relocation of commissioned teachers, and identifying irregular appointments and teachers who have not fulfilled legal requirements.

ESTABLISHING AN EVALUATION UNIT WITHIN THE MINISTRY OF EDUCATION. The decentralization process is worthwhile only if it improves the quality and equity of the education services. The role of the central ministry is crucial to ensuring that decentralized entities have the capacity and information at their disposal to effect changes in their education programs at the level of municipal subprojects. Learning from the many education programs implemented in the country in the past is as crucial as looking for innovative experiences in other countries. The establishment of rigorous monitoring and evaluation mechanisms is essential for this role of knowledge dissemination and piloting, and is one of the biggest challenges facing the central ministry. The PEIs and the education plans prepared and executed by the department and municipal levels will need to be monitored and evaluated carefully to ensure that national goals relating to quality and equity are being achieved.

The MEN will have to play a significant part in piloting and evaluating educational strategies appropriate for the rural areas. Such pilots and evaluations, as mentioned, will include *Escuela Nueva*; *Telesecundaria*; *Aceleración del Aprendizaje* (Brazil's accelerated learning program); and Colombia's nonformal approach to secondary education in rural areas, the Tutorial Learning System (SAT). The great challenge for achieving the universalization of basic education while sustaining the stability of financing is to improve social efficiency by means of positive discrimination more decidedly in favor of the poor. With these innovations there is an opportunity to increase the social efficiency of allocation by better using current resources. But it also implies social mobilization in favor of the poor and social control of quality.

In addition, the SABER test results should be systematically disseminated to teachers, parents, and the community at large.

### *d) Program Response to Mitigate Negative Impact of Violence and Displacement*

TECHNICAL ASSISTANCE IN ESTABLISHING NETWORKS IN EDUCATION IN CONFLICT AREAS. Efforts should continue in the areas of peace education and education for societies in conflict and postconflict situations. UNICEF has models that have been successfully used in other countries experiencing conflict.

PILOTING STRATEGIES FOR SCHOOL–COMMUNITY LINKAGES AND CLASSROOM METHODOLOGIES FOR PROMOTING PEACEFUL COEXISTENCE. Strategies should be pursued for increasing social capital in rural areas susceptible to violence by introducing peace studies and conflict resolution and prevention in the curriculum and classroom methodology, and by developing more participatory school governance by establishing closer links between the school and the local community and parents.

BUILDING SOCIAL CAPITAL. Building social capital has to be given priority within the education system to support efforts to decrease violence and conflict in the country. Some successful pilots will need to be taken to scale after rigorous evaluation of their effectiveness in reducing violence and building social capital. This is a prerequisite for achieving any degree of sustainable development in the education sector and it should be a critical component of the next Administration's development strategy.

EDUCATIONAL SERVICES FOR INTERNALLY DISPLACED POPULATIONS. Educational equity in Colombia is a great challenge at the start of the 21st century. Equity is not a value judgment, but rather a condition for growth. Since hundred of thousands of people have been and continue to be displaced from the rural areas under conflict to the urban and peri-urban areas of the country without any prospect of returning to their homes, short-term support is needed for the large municipalities and districts (where more *desplazados* are moving) to strengthen the educational services in these areas for displaced populations and for people in zones of violence. This may mean support of learning resources to cope with the increased number of school-age population, or it may mean additional school buildings (or portable facilities). Early childhood facilities (such as those provided under the community-based HBI model described above, if proven cost-effective) would be needed not only to ensure that these displaced children have all the benefits of early stimulation and care, but also, as at all educational levels, to help these children recover from trauma related to conflict and displacement, and to release parents to join the workforce.

# Statistical Annex

**Table A.1. Country Scores in 1998 UNESCO/OREALC—Assessment of Student Outcomes in Latin America and the Caribbean**

| | *Language* | | *Mathematics* | |
|---|---|---|---|---|
| | *Grade 3* | *Grade 4* | *Grade 3* | *Grade 4* |
| 1 | | Cuba (349) | Cuba (351) | Cuba (353) |
| 2 | Argentina (263) | Chile (286) | Argentina (251) | Brazil (269) |
| | Chile (259) | Argentina (282) | | Argentina (269) |
| | Brazil (256) | Brazil (277) | | Chile (265) |
| | | Colombia (265) | | Colombia (258) |
| | | Mexico (252) | | Mexico (256) |
| | | Paraguay (251) | | |
| 3 | Venezuela (242) | Venezuela (249) | Brazil (247) | Paraguay (248) |
| | Colombia (238) | Honduras (238) | Chile (242) | Bolivia (245) |
| | Bolivia (232) | Bolivia (233) | Colombia (240) | Dominican Republic (234) |
| | Paraguay (229) | Dominican Republic (232) | Bolivia (240) | Honduras (231) |
| | Mexico (224) | | Mexico (236) | Venezuela (226) |
| | Dominican Republic (220) | | Paraguay (232) | |
| | Honduras (216) | | Dominican Republic (225) | |
| | | | Venezuela (220) | |
| | | | Honduras (218) | |

*Source:* UNESCO/OREALC (1998).

**Table A.2. Distribution of Family Spending on Education, 1997**

| | | | | Transportation, Food, | | | | |
|---|---|---|---|---|---|---|---|---|
| *Deciles* | *Basic Tuition and Fees* | *School Entrance Fees* | *Supplies* | *University* | *Teacher* | *Uniform* | *Others* | *Total* |
| 1 | 2.96 | 4.28 | 6.79 | 0.37 | 1.39 | 6.15 | 2.38 | 2.94 |
| 2 | 4.58 | 3.77 | 8.86 | 0.37 | 1.85 | 8.50 | 5.14 | 4.13 |
| 3 | 5.71 | 3.20 | 7.67 | 1.11 | 1.77 | 9.22 | 6.26 | 4.64 |
| 4 | 5.79 | 1.42 | 9.14 | 1.21 | 2.95 | 9.78 | 8.23 | 5.07 |
| 5 | 7.61 | 6.38 | 9.42 | 3.65 | 3.73 | 9.91 | 5.32 | 6.62 |
| 6 | 7.18 | 3.09 | 8.69 | 4.61 | 5.92 | 9.72 | 9.66 | 6.76 |
| 7 | 8.59 | 14.32 | 10.53 | 7.92 | 9.82 | 9.59 | 17.52 | 8.91 |
| 8 | 11.48 | 39.91 | 10.79 | 12.34 | 11.61 | 11.66 | 11.94 | 11.69 |
| 9 | 17.50 | 8.89 | 12.97 | 21.27 | 27.15 | 14.37 | 9.37 | 18.19 |
| 10 | 28.62 | 14.73 | 15.15 | 47.14 | 33.79 | 11.11 | 24.18 | 31.04 |
| **Total** | **100.00** | **100.00** | **100.00** | **100.00** | **100.00** | **100.00** | **100.00** | **100.00** |

| | | | | Transportation, Food, | | | | |
|---|---|---|---|---|---|---|---|---|
| *Deciles* | *Basic Tuition and Fees* | *School Entrance Fees* | *Supplies* | *University* | *Teacher* | *Uniform* | *Others* | *Total* |
| 1 | 39.31 | 0.19 | 39.12 | 3.78 | 2.85 | 14.32 | 0.44 | 100 |
| 2 | 43.34 | 0.12 | 36.34 | 2.73 | 2.70 | 14.09 | 0.68 | 100 |
| 3 | 48.02 | 0.09 | 27.98 | 7.30 | 2.29 | 13.59 | 0.73 | 100 |
| 4 | 44.58 | 0.04 | 30.53 | 7.26 | 3.51 | 13.20 | 0.88 | 100 |
| 5 | 44.90 | 0.12 | 24.10 | 16.79 | 3.40 | 10.25 | 0.44 | 100 |
| 6 | 41.49 | 0.06 | 21.78 | 20.77 | 5.28 | 9.85 | 0.78 | 100 |
| 7 | 37.67 | 0.21 | 20.02 | 27.03 | 6.64 | 7.37 | 1.07 | 100 |
| 8 | 38.40 | 0.44 | 15.64 | 32.14 | 5.99 | 6.83 | 0.56 | 100 |
| 9 | 37.60 | 0.06 | 12.08 | 35.58 | 8.99 | 5.41 | 0.28 | 100 |
| 10 | 36.03 | 0.06 | 8.27 | 46.20 | 6.56 | 2.45 | 0.42 | 100 |
| **Total** | **39.09** | **0.13** | **16.95** | **30.42** | **6.02** | **6.85** | **0.54** | **100** |

*Source:* Sarmiento (2000) based on HHS data from DANE 1994–95. (Conducted every 10 years).

**Table A.3. Distribution of the Primary and Secondary Education Subsidy by Income Decile, (constant 1996 pesos)**

| *Decile* | *1* | *2* | *3* | *4* | *5* | *6* | *7* | *8* | *9* | *10* | *Total* |
|---|---|---|---|---|---|---|---|---|---|---|---|
| *Annual Household Income* | | | | | | | | | | | |
| Urban | 376,707 | 988,369 | 1,753,814 | 2,288,616 | 3,272,026 | 4,535,732 | 5,651,474 | 7,841,911 | 12,080,099 | 37,128,277 | 75,917,024 |
| Rural | 518,924 | 1,069,876 | 1,076,706 | 1,206,329 | 1,044,207 | 1,021,074 | 900,008 | 784,396 | 759,049 | 704,414 | 9,084,983 |
| Total | 895,631 | 2,058,246 | 2,830,519 | 3,494,945 | 4,316,234 | 5,556,805 | 6,551,482 | 8,626,307 | 12,839,148 | 37,832,691 | 85,002,007 |
| *Number of Households* | | | | | | | | | | | |
| Urban | 464,535 | 462,456 | 582,242 | 623,741 | 711,886 | 768,726 | 795,373 | 848,921 | 885,641 | 910,284 | 7,053,805 |
| Rural | 486,415 | 488,866 | 368,767 | 326,949 | 236,986 | 190,156 | 148,949 | 101,762 | 72,837 | 32,398 | 2,454,085 |
| Total | 950,950 | 951,322 | 951,009 | 950,690 | 948,872 | 958,882 | 944,322 | 950,683 | 958,478 | 942,682 | 9,507,890 |
| *Income per Household* | | | | | | | | | | | |
| Urban | 810,934 | 2,137,218 | 3,012,173 | 3,669,176 | 4,596,278 | 5,900,323 | 7,105,438 | 9,237,504 | 13,639,950 | 40,787,575 | 10,762,564 |
| Rural | 1,066,833 | 2,188,486 | 2,919,745 | 3,689,655 | 4,406,199 | 5,369,664 | 6,042,394 | 7,708,140 | 10,421,203 | 21,742,511 | 3,701,984 |
| *Subsidy—Primary* | | | | | | | | | | | |
| Urban: total (millions) | 85,373 | 101,124 | 95,444 | 97,588 | 104,315 | 69,396 | 59,250 | 36,586 | 27,053 | 13,078 | 689,207 |
| Percent | 12.4 | 14.7 | 13.8 | 14.2 | 15.1 | 10.1 | 8.6 | 5.3 | 3.9 | 1.9 | 100.0 |
| Impact (in percent) | 26.8 | 12.1 | 6.4 | 5.0 | 3.8 | 1.8 | 1.2 | 0.6 | 0.3 | 0.0 | 1.1 |
| Rural: total (millions) | 93,725 | 98,109 | 65,301 | 45,279 | 30,452 | 19,052 | 7,495 | 4,327 | 2,924 | 315 | 366,980 |
| Percent | 25.5 | 26.7 | 17.8 | 12.3 | 8.3 | 5.2 | 2.0 | 1.2 | 0.8 | 0.1 | 100.0 |
| Impact (in percent) | 21.39 | 10.86 | 7.18 | 4.45 | 3.45 | 2.21 | 0.99 | 0.65 | 0.46 | 0.05 | 4.78 |
| Total: total (millions) | 179,098 | 199,232 | 160,745 | 142,868 | 134,767 | 88,448 | 66,746 | 40,913 | 29,977 | 13,394 | 1,056,187 |
| Percent | 17.0 | 18.9 | 15.2 | 13.5 | 12.8 | 8.4 | 6.3 | 3.9 | 2.8 | 1.3 | 100.0 |
| Impact (in percent) | 23.68 | 11.46 | 6.73 | 4.84 | 3.70 | 1.89 | 1.21 | 0.56 | 0.28 | 0.04 | 1.47 |

Table A.3. (continued)

| *Decile* | *1* | *2* | *3* | *4* | *5* | *6* | *7* | *8* | *9* | *10* | *Total* |
|---|---|---|---|---|---|---|---|---|---|---|---|
| *Subsidy—Secondary* | | | | | | | | | | | |
| Urban: total (millions) | 53,117 | 58,170 | 65,405 | 70,614 | 64,369 | 78,418 | 60,435 | 39,333 | 35,235 | 11,671 | 53,677 |
| Percent | 9.9 | 10.8 | 12.2 | 13.2 | 12.0 | 14.6 | 11.3 | 7.3 | 6.6 | 2.2 | 100.0 |
| Impact (in percent) | 14.10 | 5.89 | 3.73 | 3.09 | 1.97 | 1.73 | 1.07 | 0.50 | 0.29 | 0.03 | 0.71 |
| Rural: total (millions) | 22,449 | 34,173 | 23,831 | 21,417 | 10,354 | 11,698 | 7,856 | 4,225 | 1,882 | 409 | 138,294 |
| Percent | 16.2 | 24.7 | 17.2 | 15.5 | 7.5 | 8.5 | 5.7 | 3.1 | 1.4 | 0.3 | 100.0 |
| Impact (in percent) | 4.33 | 3.19 | 2.21 | 1.78 | 0.99 | 1.15 | 0.87 | 0.54 | 0.25 | 0.06 | 1.52 |
| Total: total (millions) | 75,566 | 92,343 | 89,236 | 92,032 | 74,723 | 90,116 | 68,291 | 43,558 | 37,118 | 12,080 | 675,062 |
| Percent | 8.44 | 4.49 | 3.15 | 2.63 | 1.73 | 1.62 | 1.04 | 0.50 | 0.29 | 0.03 | 0.79 |
| Impact (in percent) | 11.2 | 13.7 | 13.2 | 13.6 | 11.1 | 13.3 | 10.1 | 6.5 | 5.5 | 1.8 | 100.0 |

*Source:* Calculations by the *Misión Social* based on the *Encuesta de Calidad de Vida* (Quality of Life Survey), DANE, 1997.

BEST COPY AVAILABLE

**Table A.4. Per Capita Transfer for Education by Department, 1994–98**

| *1994 Department* | *ICV* | *PERCAP* | *1998 with FEC* | *ICV* | *PERCAP* | *Variation 1994–98* | *ICV* | *PERCAP* |
|---|---|---|---|---|---|---|---|---|
| Departments with ICV below the national average and per capita transfers below average | | | | | | | | |
| Córdoba | 52.7 | (61,043) | Córdoba | 52.7 | (47,822) | Chocó | 47.9 | (1,456) |
| Sucre | 54.7 | (84,671) | Sucre | 54.7 | (80,561) | Nariño | 55.0 | (19,262) |
| Nariño | 55.0 | (26,585) | Nariño | 55.0 | (45,848) | Magdalena | 61.3 | (9,824) |
| Cauca | 58.3 | (17,644) | Cauca | 58.3 | (1,065) | Bolívar | 62.7 | (9,610) |
| Cesar | 60.0 | (6,757) | Magdalena | 61.3 | (81,005) | Huila | 64.5 | (17,354) |
| Magdalena | 61.3 | (71,182) | Bolívar | 62.7 | (55,445) | Guajira | 66.1 | (530) |
| Bolívar | 62.7 | (45,835) | Huila | 64.5 | (50,584) | Meta | 66.8 | (10,259) |
| Huila | 64.5 | (33,230) | Guajira | 66.1 | (41,622) | Tolima | 66.9 | (15,827) |
| Guajira | 66.1 | (41,091) | Meta | 66.8 | (24,394) | | | |
| Meta | 66.8 | (14,135) | Tolima | 66.9 | (4,047) | | | |
| Departments with ICV below the national average and per capita transfers above average | | | | | | | | |
| Chocó | 47.9 | 28,163 | Chocó | 47.9 | 26,707 | Córdoba | 52.7 | 13,222 |
| Caquetá | 55.6 | 52,226 | Caquetá | 55.6 | 79,889 | Sucre | 54.7 | 4,110 |
| Boyacá | 60.0 | 45,545 | Boyacá | 60.0 | 58,494 | Caquetá | 55.6 | 27,663 |
| ATTNN* | 63.6 | 128,762 | Cesar | 60.0 | 18,937 | Cauca | 58.3 | 16,578 |
| Norte Santander | 66.3 | 14,361 | ATTNN | 63.6 | 185,358 | Boyacá | 60.0 | 12,948 |
| Tolima | 66.9 | 11,780 | Norte Santander | 66.3 | 41,980 | Cesar | 60.0 | 25,693 |
| Cundinamarca | 67.5 | 78,002 | Cundinamarca | 67.5 | 82,585 | ATTNN | 63.6 | 56,596 |
| Santander | 69.4 | 22,174 | Santander | 69.4 | 38,769 | Norte Santander | 66.3 | 27,619 |
| Caldas | 71.8 | 46,804 | Caldas | 71.8 | 65,356 | Cundinamarca | 67.5 | 4,583 |
| | | | | | | Santander | 69.4 | 16,595 |
| | | | | | | Caldas | 71.8 | 18,553 |

**Table A.4.** (continued)

| *1994 Department* | *ICV* | *PERCAP* | *1998 with FEC* | *ICV* | *PERCAP* | *Variation 1994–98* | *ICV* | *PERCAP* |
|---|---|---|---|---|---|---|---|---|
| Departments with ICV above the national average and per capita transfers below average | | | | | | | | |
| Antioquia | 73.3 | (36,933) | Antioquía | 73.3 | (53,274) | Antioquía | 73.3 | (16,341) |
| Risaralda | 74.3 | (2,573) | Risaralda | 74.3 | (24,473) | Risaralda | 74.3 | (21,900) |
| Atlántico | 77.0 | (116,307) | Valle | 77.8 | (27,078) | Bogotá | 84.4 | (49,522) |
| Valle | 77.8 | (27,626) | | | | | | |
| Departments with ICV above the national average and per capita transfers above average | | | | | | | | |
| Quindío | 76.2 | 80,982 | Quindio | 76.2 | 133,239 | Quindio | 76.2 | 52,257 |
| Bogotá | 84.4 | 76,815 | Atlántico | 77.0 | 15,312 | Atlántico | 77.0 | 131,619 |
| | | | Bogotá | 84.4 | 27,293 | Valle | 77.8 | 548 |

*ATTNN = Territorios Nacionales.

*Source:* Calculations by the *Misión Social* based on DNP-UDT (transfers); DNP-UDS (FEC); *Misión Social*, "La educación en cifras" (enrollments); *Misión Social*, ICV 1993.

## References

*The word "processed" describes informally reproduced works that may not be commonly available through libraries.*

Angrist, J. D., J. Bettinger, E. Bloom, E. King, and M. Kremer. 2001. "Vouchers for Private Schooling in Colombia: Evidence from a Randomized Natural Experiment. Working Paper Series No. 8343. Cambridge MA: National Bureau of Economic Research, June. *American Economic Review* (forthcoming 2002).

Filmer, D., S. Pritchett, and J-P. Tan. 1998. "Educational Attainment Profiles of the Poor (and Rich): DHS Evidence from around the Globe." Processed. Washington, D.C.: World Bank.

IEA (International Association for the Evaluation of Education). 1996. Third International Math and Science Study (TIMMS).

Laboratorio Latinoamericano de Calidad de la Educación. 1998. "Primer estudio comparativo sobre Lenguaje y Matemáticas y factores asociados en tercero y cuarto grado." Paris: UNESCO.

McEwan, P. 1995. "Primary School Reform for Rural Development: An Evaluation of Colombian New Schools." Washington, D.C.: Inter-American Development Bank.

Misión Social. 1999. Departamento Nacional de Planeación (DNP). "La calidad de la educación y el logro de los planteles educativos." *Planeación y Desarrollo*, enero–marzo de 1997. Bogotá.

PROFAMILIA. 2000. "Salud Sexual y Reproductiva en Colombia." Encuesta Nacional de Demografía y Salud, Resultados. Bogotá.

Psacharopoulos, G., C. Rojas, and E. Vélez. 1993. "Achievement Evaluation of Colombia's Escuela Nueva. Multigrade the Answer?" *Comparative Education Review*, 37 (3).

Psacharopoulos, G., and E. Velez. 1993. "Educational Quality and Labor Markets Outcomes: Evidence from Bogotá, Colombia." *Sociology of Education*, 66 (April): 130–45.

Rojas, C., and Z. Castillo. 1998. "Evaluación del programa de escuela nueva en Colombia." Instituto SER de Investigación, Bogotá.

Sarrmiento, A. 2000. "Equity and Education in Colombia." Departamento Nacional de Planeación, Bogotá. Processed.

______. 2001. "Equity and Education in Colombia." In F. Reimers, ed., *Unequal Schools, Unequal Chances. The Challenges to Equal Opportunities in the Americas.* Cambridge: Harvard University Press.

Sarmiento, Alfredo, and B. L. Caro. 1998. "La educación en cifras." Departamento Nacional de Planeación, Bogotá.

Sarmiento, Alfredo, and Blanca Lilia Caro. 1998. "El análisis de cohorte." In *La Educación en Cifras.* National Planning Department, Bogotá.

Sarmiento, Alfredo, and L. Arteaga. 1998. "Focalizar para Universalizar." *Cuadernos de Economía,* XVII (29). Bogotá.

Sarmiento Alfredo, Liliana Delgado, and Carlos Reyes. 1999. "El Gasto Público en los Servicios Sociales Básicos." Departamento Nacional de Planeación, Bogotá.

Tenjo, J. 1993. Evalución de los retornos a la inversión en educación, 1976–1989. *Planeación y Desarrollo*, Vol. 24 (Edición Especial).UNESCO. 1998. *World Statistical Outlook on Higher Education: 1980–1995*. Working Document of the World Conference on Higher Education. Paris.

UNESCO/OREALC. 1998. "Laboratorio Latinoamericano de Evaluación de la Calidad de la Educación, Primer Estudio Internacional Comparativo Sobre Lenguaje, Matemática y Factores Asociados en Tercero y Cuarto Grado." Santiago.

Vélez, C. E. 1996. "Gasto Social y Desigualdad." Departamento Nacional de Planeación/Misión Social. Tercer Mundo. Bogotá, Marzo.

World Bank. 1994. "Poverty in Colombia." Report No. 13757-CO, 1 December 1994. Washington, D.C.: World Bank.

______. 1999. "Violence in Colombia: Building Sustainable Peace and Social Capital." Report, March 22. Washington, D.C.

# 22

# Health

*This Chapter was written by María-Luisa Escobar and Panagiota Panopoulou.*

## I. Introduction

Colombia ranked first among 191 member states in terms of fairness of financial contribution and financial risk protection, according to *The World Health Report 2000* (World Health Organization 2000).[1] The report defined fair financing as a situation where "the risks each household faces due to the costs of the health system are distributed according to ability to pay rather than to the risk of illness."[2] Fair financing constitutes one of the three goals to be achieved by national health systems, the others being good health and responsiveness to the expectations of the population. Good health was measured by two indexes—disability–adjusted life

---

[1] This Chapter was prepared by the authors based on information provided by a wide variety of Colombian institutions, agencies, and professionals in the health sector. The authors are grateful to Juan Pablo Uribe and Pablo Gottret for their most valuable input, and to all others who contributed to the research process.

[2] The index of fairness of financial contribution is given by the following formula:

$$\left[1-4\,\frac{\sum_{i=1}^{n}\left|HFC_i-\overline{HFC}\right|^{3}}{0.125n}\right]$$

where $HFC_i$ is the financial contribution of household i and $\overline{HFC}$ is the average financial contribution across households. The household's contribution to the financing of the health system is defined as the ratio of total household spending on health to its permanent income above subsistence. For more details see Chapter Five and the Statistical Annex, *The World Health Report 2000.*

expectancy, and the index of equality of child survival. Responsiveness to the expectations of the population was based on a survey of key informants and facility surveys on issues like prompt attention, quality of basic amenities, choice of care provider, and so forth. Although Colombia is currently spending a high share of its GDP on health (9.3 percent), it is ranked 22nd worldwide according to an overall health system performance index defined in the World Health Organization report, and is first among Latin American countries[3] (Figure 1).

This is an admirable achievement for a country that, before 1993, was characterized by a segmented health system that divided the different social groups into three categories: the Ministry of Health, the social security institute(s), and the private sector. Under this system, individuals covered by a specific health plan were either those employees whose companies paid part of their contribution (social security) or individuals who could afford and opted for private insurance. The rest of the population resorted to the services of the national health system and received care according to the availability of resources in medical institutions financed by the government.

By the beginning of the 1990s the health system was experiencing a number of serious problems, among which were low levels of coverage and access to health care services, inequity in the distribution of public subsidies for health, low quality of services in government health care facilities, and inefficiency in the use of public health resources. There was, therefore, a need for radical changes to make the system more cost-efficient, equitable, and accessible. These changes were effected through the passage of Law 100 *(Ley 100)* in December of 1993, which reformed the health system in Colombia.

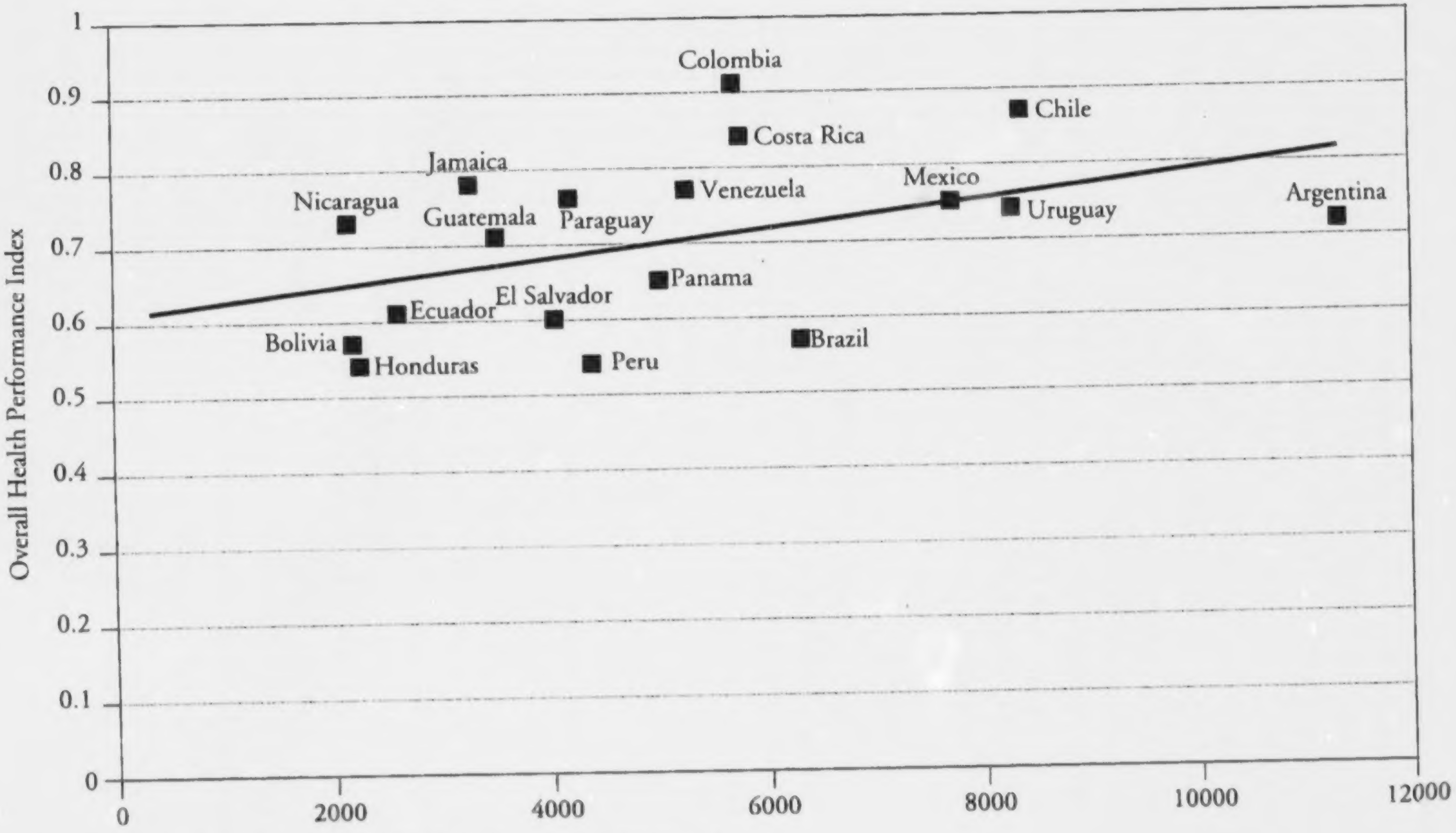
Undoubtedly the biggest success of the reform has been the increase in affiliation, with health insurance coverage increasing from 24 percent to 55 percent of the population between 1993 and 1997, according to the data of the National Health Superintendency. However, high unemployment rates had an adverse effect, especially on the contributory regime, thus lowering affiliation rates to 54 percent by 2000. Rural areas experienced a much higher increase in coverage since they appeared to increase their affiliation rate from 7 percent in 1993 to 48 percent in 1997. Furthermore, increases in coverage were concentrated in the lower-income deciles where, for example, insurance coverage in the first decile rose tenfold, from around 4 percent in 1993 to 40 percent in 1997. In terms of access to health care, of the total number of individuals who reported ill in 1993, 68 percent received health care services by a professional. Four years later, the proportion of individuals who received health care services increased to 74 percent.

Despite these improvements, a number of issues have threatened the stability of health sector reform. The slow transformation of supply to demand subsidies has hampered the affiliation process in the subsidized regime and provided no incentives

---

[3] Colombia was ranked 22nd with an uncertainty interval of 14–29, while Chile was ranked 33rd with an uncertainty interval of 22–43 (see Annex Table 10, Statistical Annex, *The World Health Report 2000*).

Figure 1. Overall Health Performance and GNP per Capita (PPP)



*Sources:* Data of *World Health Report 2000; World Development Indicators* (2001).

for public hospitals to restructure and compete with the private sector. At the same time, delays in transfers from national territories (departments and municipalities) to *Administradoras de Régimen Subsidiado* (Administrators of the Subsidized Regime, ARSs) and ultimately to health care providers have created an accumulated debt and jeopardized the viability of the system. Evasion in the contributory regime has deprived the Compensation Account of the *Fondo de Solidaridad y de Garantía* (Solidarity Fund, FOSYGA) of valuable resources and resulted in a limited amount of transfers to the subsidized regime through the "solidarity point" mechanism. Lack of information among the population eligible for the subsidized regime has created confusion between the concepts of the *Sistema de Selección de Beneficiarios para Programas Sociales* (Selection System of Beneficiaries for Social Programs, SISBEN) and affiliation, while the complicated nature of the SISBEN index has not allowed its frequent updating. Financial imbalances in the *Instituto de Seguros Sociales* (Institute of Social Security, ISS) health services have increased the economic fragility of the system, while the Treasury has covered ISS losses. Finally, the system has been challenged to cover expenditure for health care services not included in the health care benefit package of Law 100 based on the Constitutional "right to life."

This Chapter analyzes the challenges facing the Colombian health sector, and at the same time recognizes the important steps achieved after the 1993 reform. It aims to inform policymakers about the issues and policy options that will contribute to universal coverage, solidarity, and quality of health care services, principles that characterize the most advanced health systems in the world and that are the main goals of Law 100. Its main findings are:

- The Colombian health system does not suffer from lack of funds. The resources available are sufficient to achieve full coverage and consequently finance the health care benefit package for the poor in the subsidized regime, provided that they are distributed accordingly.
- The elimination of evasion and elusion, the transformation of the full amount of available resources of the *Situado Fiscal*, and the use of the accumulated reserves of FOSYGA for increasing coverage would mean the expansion of the subsidized regime by 6.2 million individuals (or 65 percent of the population already affiliated to the subsidized regime).
- The restructuring of public hospitals, which are currently financed by government subsidies and not by providing (selling) their services will, in 10 years, accumulate a net savings of US$2 billion (in 2000 dollars), equivalent to 3 percent of the 2000 GDP.
- The reform of the ISS can provide, in 10 years, a fiscal savings varying between 1.2 and 2.4 percent of the 2000 GDP, depending on the type of the reform.
- The implementation of information and education campaigns regarding health sector reform is crucial for increasing coverage and access to health care.
- The lack of definition regarding the content of the *Plan Obligatorio de Salud* (Mandatory Health Plan, POS) poses serious problems for the viability of the

health system. The current void can be filled by the redefinition of the content of the health care benefit package and approval of a *ley estatutaria* for the health sector.

This Chapter will focus on the issues of financing, organization, and management.

## II. Background

### a) Before the Reform

Like in other Latin American countries, such as Argentina and Mexico, the Colombian health system before the reform was organized as a three-tier system: the public (or official) sector, the social security (or decentralized) sector, and the private sector. Both health service provision and financing were segmented for each group of the population. The hub of the public sector was the *Ministerio de Salud* (Ministry of Health, MOH), which, in collaboration with other agencies, was responsible for the provision of health care services to the low-income population not protected by a social security mechanism, estimated to be around 70 percent (Zukin 1985). The social security sector accounted for around 15 percent of the population, while the remaining 15 percent were covered by the private sector.

The social security sector was composed of two types of organizations: (a) *Cajas de Previsión Social* (Social Health Insurance Funds, CPSs) such as the ISS for employees in the private sector and the *Caja Nacional de Previsión Social* (National Health Insurance Fund, *CAJANAL*) for public sector employees; and (b) *Cajas de Compensatión Familiar* (Family Compensation Funds, CCFs). The first were quasi-public agencies providing sickness and maternity insurance and income maintenance plans, such as retirement and old age pensions. The largest and by far the most important CPS was the ISS, to which 12 percent of the population were affiliated and which operated and continues to operate its own national network of hospitals and outpatient facilities. The CCFs, on the other hand, were private legal entities organized along the lines of consumer cooperatives. Enrollment was mandatory and was made effective through the employee's firm. Besides health care services, these funds provided other benefits, such as recreation, education, and merchandising. The private sector is comprised of private health insurance companies, hospitals, and clinics, and was financed by out-of-pocket expenditures of the wealthy.

Before 1993 the Colombian health system was facing problems with respect to low levels of coverage and access to health care services. Around 45 percent of the urban and 80 percent of the rural population were not covered by any insurance scheme and were heavily dependent on the public provision of services or on the private sector (Molina, Giedion, and Alviar 1993). According to the 1992 National Household Survey, one quarter of the population that had a health problem did not have access to the health care system. This situation affected 34 percent of the lowest-income decile and only 2 percent of the highest-income decile, providing evidence of inequity among different socioeconomic groups (Plaza, Barona, and Paredes 1999). In addition, 40 percent of all outpatient visits and procedures and 45 percent of hospitalizations were in private facilities, suggesting that the public sector, offering services for free, was considered to be of low quality and/or rationed demand (ibid.). Furthermore, in 1992, 12 percent of hospitalizations and 20 percent of surgeries in the public sector were for patients in the wealthiest income quintile of the population. This implied that the wealthy might not have used the public sector for primary-type services (outpatient care, dentistry, and so forth), but mainly for complex and high-priced procedures (Bitrán y Asociados 1998). This phenomenon suggested inefficiency in the use of public resources for health, and inequity in their distribution.

### *b) The Reform: Law 100 of 1993*

Law 100 of 1993 mandates the creation of a new system characterized by universal national health insurance coverage, involving cost-sharing between the affiliate/insured and the insurance entity on the financing side, and a pluralistic system of provision, involving both private and public providers on the supply side. The new law has three main goals: universal coverage, solidarity, and efficiency with adequate quality.

According to the universal coverage principle, every citizen, regardless of financial means, has access to basic health care services. Those who are able to pay are treated under the contributory regime (*régimen contributivo*) and are liable for a monthly contribution equal to 12 percent of their wage income, of which the employee pays 4 percent and the employer pays 8 percent. Self-employed individuals are obliged to pay the total 12 percent of the contribution. Public employees have as a minimum income base for contributions one minimum monthly wage, while the self-employed have two minimum monthly wages.

On the other hand, the poor and indigent do not make any insurance contribution and are covered under the subsidized regime *(régimen subsidiado)*. The insurance entities of the subsidized regime are called *Administradoras de Régimen Subsidiado* (Administrators of the Subsidized Regime, ARSs). To be eligible for the subsidized regime, individuals must be classified by the municipalities as SISBEN level 1 or 2, SISBEN being a proxy means-tested index. After complete coverage of the population at SISBEN levels 1 and 2, further beneficiaries come from the SISBEN level 3 population, starting with the households of lower to higher SISBEN scores. Individuals who are eligible for affiliation to the subsidized regime but have not yet been affiliated are called *vinculados*, and have the right to receive health care services at lower prices in public hospitals. However, in many cases public hospitals provide health care services for free to *vinculados* who claim that they cannot afford to pay.

Every eligible contributor freely chooses the *Empresa Promotora de Salud* (Health Promotion Entity, EPS) to which he or she wants to affiliate. The individual then selects the preferred family physician and referral hospital available within the EPS. Changes of selected insurers and/or providers are allowed once a year. EPSs are responsible for the collection of contributions. These contributions, in turn, are concentrated in a single fund, the *Fondo de Solidaridad y de Garantía* (Solidarity Fund, FOSYGA), with EPSs receiving a capitation payment for each affiliate (*Unidad de Pago por Capacitación*, Capitation Payment Unit, UPC). The subsidized regime allows free choice of insurer. The subsidized regime is financed from government subsidies and a solidarity mechanism called the "solidarity point" (*punto de solidaridad*) that mandates that 1 percentage point of the 12 percent wage contribution of the members of the contributory regime should be directed to the subsidized regime.

Both regimes have access to a basic benefit package, but members of the contributory regime enjoy additional services to those received by members of the subsidized regime. The main difference between the *Plan Obligatorio de Salud* (POS) for the contributory regime and the *Plan Obligatorio de Salud Subsidiado* (Subsidized Mandatory Health Plan, POSS) is that the POSS includes second- and third-level hospitals services. Thus, the UPC for the subsidized regime is 40 percent of the value of the UPC for the contributory regime. The health care benefit package offers family coverage. In addition to the POS, most EPSs offer extra services in the form of complementary health plans (*Plan de Atención Complementaria*, Complementary Health Plan, PAC) or prepaid medicine plans (*Plan de Medicina Prepagada*, Prepaid Medicine Plan, PMP). For an individual to have a PAC or a PMP he or she should be affiliated to the contributory regime. Both private and public health care providers (*Instituciones Prestadoras de Salud*, IPS) are responsible for the provision of the POS. The IPSs are supposed to be contracted, on a competitive basis, by the insurance entities. However, the fact that certain EPSs construct their own IPS and suggest to their affiliates the use of the specific units violates this principle and has created serious concerns.[4] Figure 2 illustrates how the Colombian health care system is organized, while Table 1 presents a review of health sector indicators.

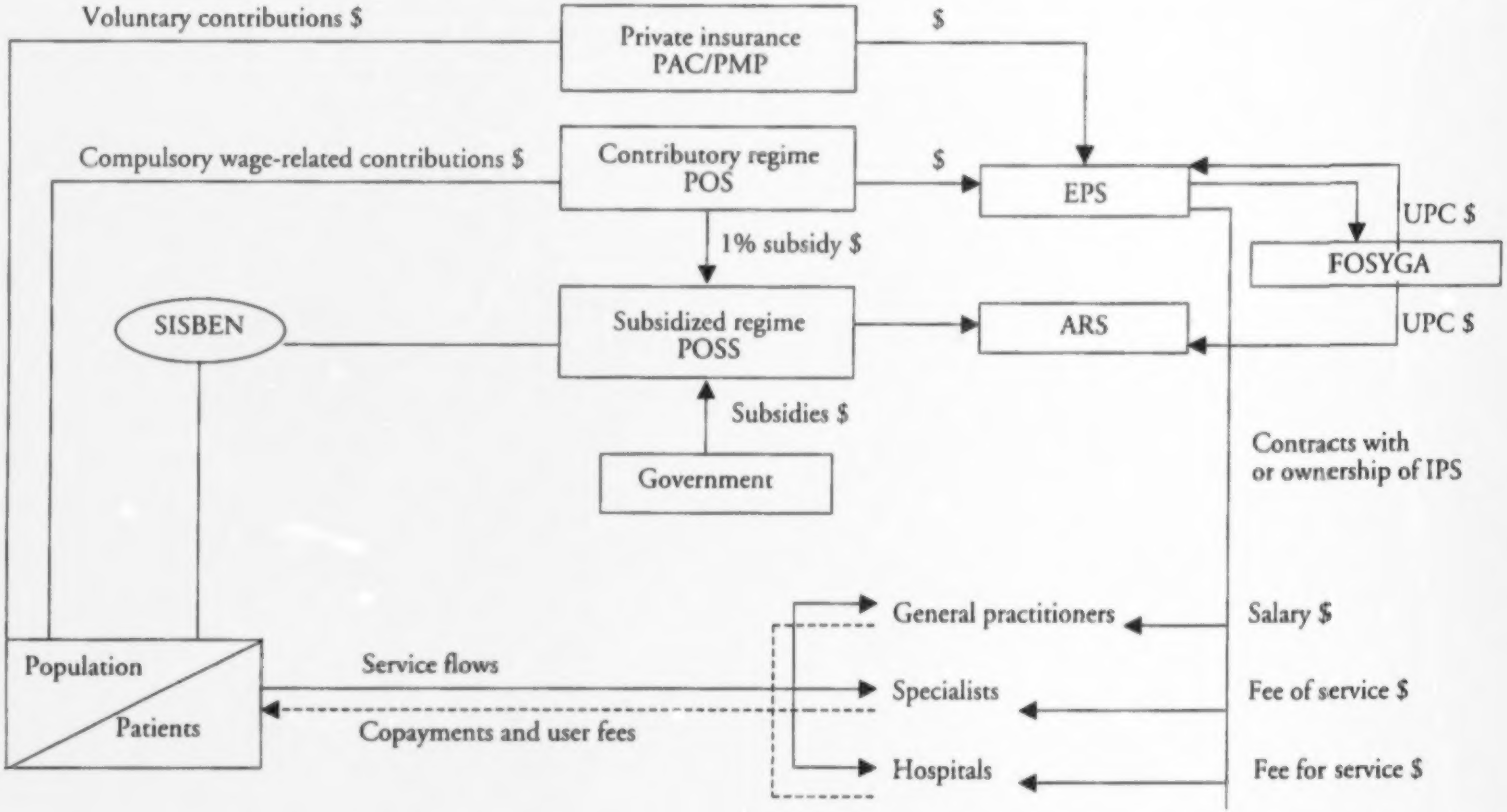
By 2000, 13.4 million individuals were part of the contributory regime (around 32 percent of the total population), while 9.5 million individuals were part of the subsidized regime (22 percent of the total population), giving a national coverage rate of around 54 percent, according to data of the National Health Superintendency. Given that in 1993 only 24 percent of the population were insured, the introduction of the health reform increased health insurance coverage by 30 percent, with the majority of newly insured being poor individuals. However, as can be seen in Table 1, the number of affiliates in the contributory regime decreased after 1998 due to the economic crisis and the increase in unemployment, while the number of affiliates in the subsidized regime increased only marginally between 1999 and 2000.

As was expected, the creation of ARSs introduced a number of new insurance entities in the subsidized regime, while there was also a 45 percent increase in the number of insurers in the contributory regime. The number of EPSs increased to roughly 30 (two thirds of which are private); the number of ARSs exceeded 200, many of which were later severely criticized for lack of managerial capacity and

---

[4] Law 100 does not prohibit vertical integration.

Figure 2. The Colombian Health System After the Reform of 1993


Voluntary contributions $
Private insurance
PAC/PMP
$
Compulsory wage-related contributions $
Contributory regime
POS
$
EPS
UPC $
FOSYGA
1% subsidy $
SISBEN
Subsidized regime
POSS
ARS
UPC $
Subsidies $
Government
Contracts with
or ownership of IPS
General practitioners
Salary $
Population
Patients
Service flows
Specialists
Fee of service $
Copayments and user fees
Hospitals
Fee for service $

*Note:* Service flows are shown as broken lines and financial flows as solid lines accompanied by the currency symbol ($).

**Table 1. Health Sector Indicators**

| *Indicators* | *Before the Reform (1991)* | *Seven Years After (2000)* |
|---|---|---|
| Percent of affiliated total population | 24 | 54 |
| Percent of affiliated poor population | 0 | 55 |
| Number of insurers, contributory regime* | 20 | 29 |
| Number of insurers, subsidized regime | 0 | 237 |
| Total public resources for health as a percentage of GDP | 1.0 | 5.2 |
| Resources for demand subsidies (as a percentage of total resources for health, percent) | — | 47 |

*Includes the ISS and the *Cajas* for public employees.

*Source:* Fedesarrollo (2000), data of the National Health Superintendency.

transparency. The result is that regulations implemented in 2001 decreased the number of ARSs to below 50.

In terms of resources assigned to health, there was an important increase in the last 10 years as a result of Law 100 of 1993, Law 60 of 1993 (the Decentralization Law), and the Constitution of 1991. Total public expenditure for health in 1991 was slightly higher than 1 percent of GDP, reaching 5.2 percent of GDP by 2000. Before 1993 these resources were mainly used for the financing of public hospitals in the form of supply subsidies (historical budgets). Law 100, however, mandated the transformation of supply subsidies to demand subsidies in the form of UPCs available to insurance entities for the financing of the health care plan of the subsidized regime (for more details see section on Financing). As a result, by 2000, demand subsidies as a percentage of total health resources were equal to 47 percent.

### *c) Implementation of the Reform*

The implementation of the reform affected all areas of the health sector. Given the wide spectrum of the reform, this section will concentrate on insurance coverage, access to health care, quality of health care, and equity issues within these categories.

#### i. Insurance Coverage

The most impressive results of health sector reform have been observed in the area of insurance affiliation. Coverage reached its peak in 1998, with around 24 million affiliates in both regimes accounting for 60 percent of the total population (Table 2). However, high unemployment rates had an adverse effect, especially for the contributory regime, resulting in a decrease of affiliation in 2000 to 54 percent.[5]

---

[5] Sources other than the National Health Superintendency offer slightly different estimates of the number of affiliates to the system. According to the 2000 Demography and Health Survey, the level of affiliation as a percentage of the total population was higher, at around 58 percent. The corresponding percentage of the 2000 National Household Survey was 53 percent.

**Table 2. Number of Affiliates, 1996–2000**

| *Year* | *Contributory Regime* | *Percent* | *Subsidized Regime* | *Percent* | *Total Affiliates* | *Percent* | *Total Population* |
|---|---|---|---|---|---|---|---|
| 1996 | 13,728,297 | 34.9 | 5,981,774 | 15.2 | 19,710,071 | 50.2 | 39,295,797 |
| 1997 | 14,969,278 | 37.4 | 7,026,690 | 17.5 | 21,995,968 | 54.9 | 40,064,092 |
| 1998 | 16,090,724 | 39.4 | 8,527,061 | 20.9 | 24,617,785 | 60.3 | 40,826,815 |
| 1999 | 13,652,878 | 32.8 | 9,325,832 | 22.4 | 22,978,710 | 55.3 | 41,589,018 |
| 2000 | 13,409,088 | 31.7 | 9,510,566 | 22.5 | 22,919,654 | 54.2 | 42,321,386 |

*Note:* Percentages are of total population.
*Source:* Data of the Ministry of Health.

Urban areas appear to have a higher number of affiliates than rural areas. However, the rate of increase in rural areas has been higher than the rate of increase in urban areas. Coverage in rural areas increased from 7 percent of the total population in 1993 to 48 percent of the total population in 1997. At the same time, the increases in coverage have concentrated in the lower-income quintiles (Figure 3). For example, in the first quintile insurance coverage rose nearly seven times, from 6 percent in 1992 to 43 percent in 1997, while in the fifth quintile coverage rose modestly, from 60 to 75 percent. Within the new system the ISS continues to play an important role. Before 1992, around 15 percent of the total population appeared affiliated to the ISS, while by 1997 this number had grown to just over 22 percent. More recent data confirm that by 2000 the ISS was in a crisis, losing affiliates to other EPSs (Table 3).

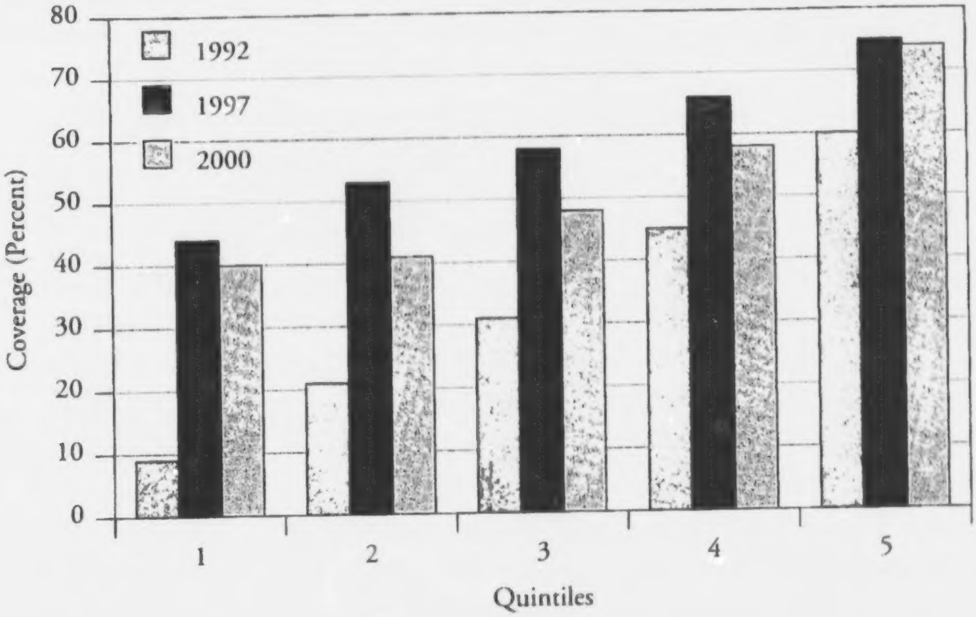
Although coverage increased considerably after the reform, one has to take into account that, according to figures of the Ministry of Health for 2000, around 32 percent of the poor population are still not covered by the system.[6] In addition, despite the fact that according to the law only individuals categorized as SISBEN levels 1 and 2 and in some cases as SISBEN level 3 are the strictly eligible population for the subsidized regime, data show that individuals with a higher SISBEN score and with the capacity to pay have affiliated to this regime (Ministerio de Salud 2000; World Bank 2001; Panopoulou 2002).[7]

---

6. According to data of the Ministry of Health, around 9.5 million people were affiliated to the subsidized regime in 2000, and the national population was around 42 million. Given that approximately one third of the population is expected to become affiliated to the subsidized regime (13.9 million), the number of nonaffiliated individuals as a percentage of the eligible population is around 32 percent (4.4 ÷ 13.9).

7. Estimates of the exact number of individuals who belong to the subsidized regime but are in SISBEN level 3 and higher should be treated with caution given that for all studies mentioned above, the SISBEN level of the individual is constructed based on information available in national surveys and is not reported by the individual himself or herself. According to the estimates of the first two studies, approximately 10 percent of individuals with a SISBEN classification document are in SISBEN levels 4 and 5.

Figure 3. Coverage Rates by Quintiles



*Source:* Vélez and Foster (2000) for 1992 and 1997; authors' calculations for 2000.

### ii. Treatment Rates

Insurance is a necessary but not a sufficient condition to receive health care services. Estimates of treatment rates (that is, the ratio of the number of individuals reporting receiving medical care to the number of individuals reporting being ill) offer an approximate measure of receiving health care. From the total number of individuals that reported being ill in 1993, 68 percent received medical attention by a professional. By 1997 the proportion of individuals who received health care services when ill had increased to 74 percent. In 1997, the treatment rate among affiliates reached as high as 79 percent, while among nonaffiliates the treatment rate was much lower, at 64 percent.[8] Unfortunately, data available for 2000 (*Encuesta Nacional de Hogares 2000*, National Household Survey 2000, ENH/2000) are not comparable with the data for 1993 and 1997.

### iii. Quality of Health Care

The data of the 1997 National Quality of Life Survey show that among individuals who received health care services after the reform, the great majority—more than 80

---

[8] The surveys used for the calculation of the treatment rates are *Encuesta de Caracterización Socioeconomica* 1993 (Survey of Socioeconomic Characterization, CASEN/93) and *Encuesta Nacional de Calidad de Vida* 1997 (Survey of Quality of Life, ENCV/97).

**Table 3. Changing Patterns of Health Insurance, Percentage of Affiliates**

| *Year* | *Not Insured* | *ISS* | *Other EPSs* |
|---|---|---|---|
| 1992 | 68.9 | 15.0 | 0.0 |
| 1997 | 43.2 | 22.1 | 12.2 |
| 2000 | 47.7 | 15.3 | 17.3 |

*Note:* Percentages are of total population. Percentages do not add up to 100 percent horizontally because of the existence of other types of insurance entities.
*Source:* Vélez and Foster (2000) for 1992 and 1997; authors' calculations for 2000.

percent—reported that the quality of health care services was good (Table 4). In terms of timing, the percentages reporting that the service was prompt (*servicio oportuno*) were equally high. Satisfaction levels did not differ between chronically ill individuals and individuals that had a health problem within the last 30 days. Similar are the results obtained by the data of a 2000 national survey carried out by the *Defensoría del Pueblo* for general consultations, where 42 percent received a consultation on the same day that they requested one (Table 5). However, in the case of a consultation with a specialist, 25 percent had to wait from 15 to 30 days.

### *d) Financing*

Health system resources are derived from all levels of government—national, departmental, and municipal. At the national level the most important role is played by the FOSYGA. The FOSYGA was created by Law 100 to monitor the financing and administration of the contributory and subsidized regime, the promotion of public health, and the payment of health care services that result from traffic accidents and catastrophic and terrorist events. It consists of four accounts: Compensation, Promotion, Solidarity, and Traffic Accidents and Catastrophic and Terrorist Events (ECAT) (Figure 4). The Compensation Account manages the resources of the contributory regime. The latter is financed by the contributions of the affiliates to the

**Table 4. Quality of Health Care, 1997**

| | *Ill* | *Chronically Ill* |
|---|---|---|
| Service: Prompt | 85.5 | 83.8 |
| Service: Delayed | 14.5 | 16.2 |
| **Total** | **100.0** | **100.0** |
| | | |
| Service: Good | 83.6 | 80.0 |
| Service: Regular | 13.1 | 16.1 |
| Service: Bad | 3.3 | 3.9 |
| **Total** | **100.0** | **100.0** |

*Note:* Percentages add up to 100 percent vertically.
*Source:* Departamento Nacional de Planeación (2001).

**Table 5. Waiting Time to Receive Treatment**

| *No. Days* | *General Consultation* | *Specialized Consultation* |
|---|---|---|
| From 0 to 1 | 42.7 | 26.6 |
| From 2 to 3 | 14.7 | 15.3 |
| From 4 to 14 | 14.1 | 27.3 |
| From 15 to 30 | 10.5 | 25.5 |
| More than 30 | 1.9 | 5.4 |
| Do not inform | 16.1 | 0.0 |
| **Total** | **100.0** | **100.0** |

*Note:* Percentages add up to 100 percent vertically.
*Source:* Departamento Nacional de Planeación (2001).

regime. EPSs are responsible for the collection of these contributions. If the difference between the contributions received (12 percent of the wage income of each affiliate) and the total amount of risk-adjusted premiums for the affiliated population of the insurance entity is positive, the insurance entity sends the surplus to the FOSYGA Compensation Account. On the other hand, if the difference is negative, the insurance entity receives the difference by the same account. The FOSYGA Compensation Account appeared to have surpluses from 1996 to 1999, while in 2000 it recorded a deficit of COP81,000 million (US$33 million). According to MOH officials, the deficit was the result of the full inclusion of affiliates of the ISS, the largest insurance entity in the contributory regime, in this account.

The Solidarity Account manages the resources of the mechanism of the *solidarity point*, which is used for the financing of the subsidized regime. Other national resources which are used for the financing of the subsidized regime are a portion (between 5 and 20 percent) of the resources administered by the CCFs, the *Situado Fiscal*, and the *Rentas Cedidas*.

**Figure 4. Financing of the Health System**

| Resources | | |
|---|---|---|
| National | FOSYGA | Compensation Account<br>Promotion Account<br>Solidarity Account<br>ECAT Account |
| | Family Compensation Funds (CCF)<br>Other Programs (Mental Health, Old Age, etc.) | |
| Departmental | Fiscal Situation<br>Transferred Rents | |
| Municipal | Participations of Current National Income (PICN) | |

*Source:* Data of Institute of Social Security.

The definition of most of the sources of funding at the national level have been created by Law 100 of 1993, while departmental resources have been defined by Law 60 of 1993 (the Decentralization Law). The latter defines the *Situado Fiscal* and the *Rentas Cedidas* to be allocated to the health sector. Although these resources were initially destined for hospitals as supply subsidies, both Law 100 and Law 344 of 1996 mandate their gradual transformation to demand subsidies which are going to be used for increasing the insurance coverage in the subsidized regime. Table 6 gives the proportion of the total transfer that has to be transformed into demand subsidies. Nevertheless, as seen later in this Chapter, this transformation was not completed.

**Table 6. Transformation of the Fiscal Situation and the Transferred Rents, 1997–2000**

| *Transfer* | *1997* | *1998* | *1999* | *2000* |
|---|---|---|---|---|
| Fiscal Situation | 15 | 25 | 35 | 60 |
| Transferred Rents | 0 | 15 | 25 | 60 |

*Note:* Figures are percentages of the size of the demand subsidies.
*Source:* Law 344 of 1996.

Another form of financing comes directly from the national government. Initially, the national government was obliged to put 1 peso in the FOSYGA Solidarity Account for every peso transferred from the contributive regime through the solidarity mechanism. However, the government did not fulfil this obligation between 1995 and 1998, accumulating a considerable debt. In 1998, and in accordance with the modification of Law 100 of 1993 by Law 344 of 1996, the government cannot contribute less than a quarter of a peso for every peso received by the mechanism of the solidarity point.

Recognizing the rather complicated nature of the financing of the subsidized regime, the Colombian government recently approved Law 715 of 2001 which reforms Law 60 and consequently the system of allocation of resources within the subsidized regime (for more details on Laws 60 and 715 see section on Delays in Transfers from National Territories to ARSs and Ultimately to Health Care Providers).

## III. Sector Issues

### *a) The Social Security Institute*

The Social Security Institute (ISS) is the largest EPS in the country and the most important among all public insurance entities. Given that the process of transformation of the "old" to the "new" system is still incomplete, the ISS plays a key role in the health system and in health reform. Because of its size and history, the ISS decisively influences the market; because of its particularly critical financial situation and lack of complete information on its beneficiaries, the ISS is a net burden to the FOSYGA Compensation Account, importantly contributing for the first time in 2000 to a deficit in this account of COP81,000 million (US$33 million).

The ISS was created in 1946. The approval of Law 100 gave the ISS the legal form of an *Empresa Industrial y Comercial del Estado* (Industrial and Commercial State Company). The ISS is authorized to manage retirement pensions, workers' compensation, health insurance (ISS–EPS), and health service delivery (ISS–IPS). Each area—pensions, workers' compensation, and health insurance—is treated separately from an accounting perspective. However, in health, the EPS business and the IPS business are budgeted and accounted for jointly. With the introduction of health reform of 1993, the ISS health arm showed itself to be an inefficient institution, unable to compete with the private sector. ISS difficulties, including noncompliance with minimum financial indicators, arise primarily from (a) the mixture of financing (EPS) and delivery (IPS) of services; (b) difficult labor issues and high fixed costs relative to service provided, which make the ISS–IPS noncompetitive in the market; (c) inadequate planning and control; and (d) poor quality of services.

### i. Mixed Financing and Delivery

One of the major problems facing the ISS is the mix of financing and delivery. According to the ISS formal structure, financing is managed by the ISS–EPS, which also manages the *Centro de Atención Ambulatoria* (Centre for Ambulatory Care, CAAs). On the other hand, the ISS hospitals are managed under the ISS–IPS unit. Currently, the ISS has 35 hospitals and 240 ambulatory service centers. Notwithstanding ISS formal structure, the cross-subsidy from EPS to IPS is reflected by the huge leaps and declines in liabilities and returns assigned to the ISS–IPS and to the ISS–EPS by ISS's formal balance sheets and income statements. The unlikely behavior of these and other variables imply that liabilities, revenues, and expenditures are likely being assigned arbitrarily between the IPS and the EPS. Moreover, IPS budgets are approved based on historical behavior and revenues, and do not reflect market prices for services that the ISS–EPS would be able to obtain elsewhere if not forced to purchase services from the ISS–IPS.

### ii. Labor Issues and High Fixed Costs

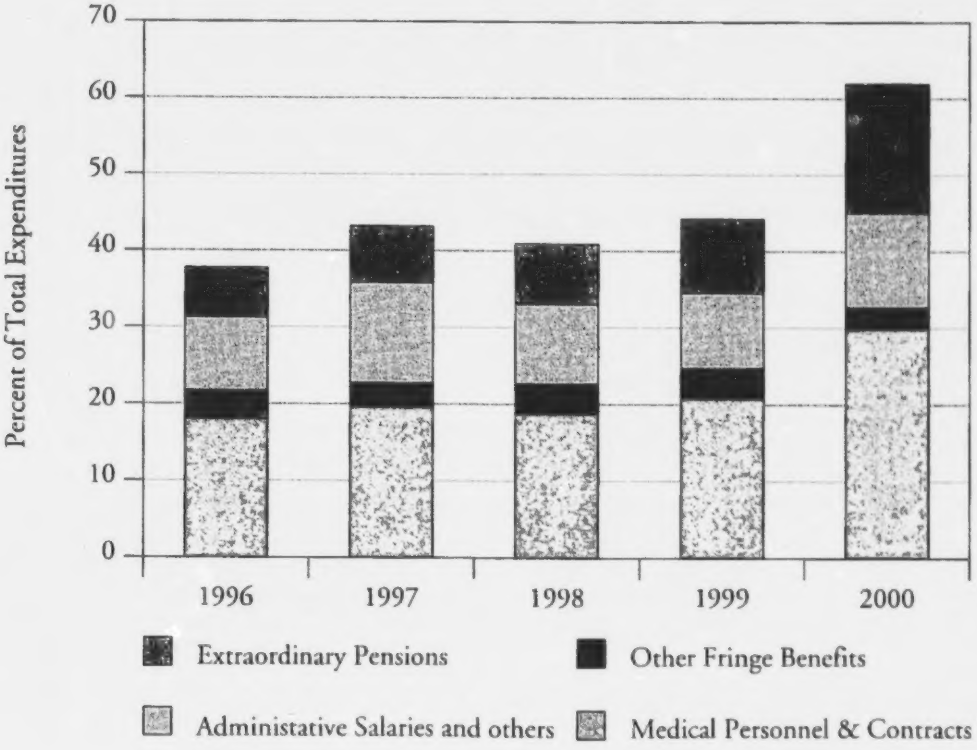
One of the major problems of the ISS–Health is its high and inflexible costs derived primarily from high labor costs and generous labor agreements. In reality, the ISS enjoys a "preferred treatment status" among public institutions when it comes to labor issues. ISS's high labor costs derive from its large number of employees and generous benefits, effectively defended by a strong coalition of internal unions and outside political support. As of February 2000, the ISS–Health had a total 33,000 workers, of which 19,000 were permanent or regular employees deriving all benefits from labor contracts or special agreements with labor unions, and 14,000 were contracted workers. Health workers (both permanent and contracted) represented 90 percent of ISS's total number of employees. Similarly, ISS health salaries represented 88.4 percent of ISS total payroll. Moreover, ISS salaries have been increasing in real terms as a result of labor agreements. The last agreement generated a real increase of the basic salary of 2.4 percent in 1997, 1.48 percent in 1998, and 8.21 percent in 1999. The problem is compounded by the fact that the basic salary is used as a base to calculate all other fringe benefits, which implies that such increases in real terms had compounded effects on total expenditures. As a result, labor costs (including extraordinary pensions or out-of-pocket pension benefits, administrative salaries, salaries to medical personnel, and fringe benefits) have been increasing as a percentage of total expenditures from about 37 percent in 1996 to over 60 percent in 2000 (Figure 5).

A major consequence of ISS's high fixed costs is that it is competitive neither as an administrator of insurance (EPS) nor as a health services provider (IPS). Private EPSs are able to contract services with lower-cost health providers and increase quality and choice. The ISS–IPS is virtually unable to sell its services to outsiders. In 2000 less than 0.5 percent of total ISS revenues derived from such sale of services, despite having highly specialized hospitals with top-level technology.

### iii. Absence of Planning and Control

The absence of adequate planning and control mechanisms has led ISS to make abrupt and costly decisions. For instance, in 1997, facing an initial decline in the number of

**Figure 5. ISS Expenditures**



affiliates, the ISS promoted the entry of beneficiaries without applying a minimum enrollment period for service eligibility. As a result, 24 percent of ISS's medical expenditures are spent on high-cost, low-incidence events (for example HIV patients requiring hemodialysis or transplants) compared to only 11 percent in competing EPSs. Similarly, that same year, the ISS allowed affiliates to freely choose their provider *(libre adscripción)*. This dramatically increased its costs and worsened its debts toward third parties, which later could not be honored. Total liabilities increased 44 percent in real terms between 1997 and 1998, hurting other private providers as they saw their working capital tied up in nonperforming accounts receivable from the ISS. As credibility and credit with the private sector diminished, so did outside purchases of medical services, which dropped 67 percent in real terms between 1997 and 2000, and therefore increased the number of ISS beneficiaries moving to private EPSs.

Another major problem is that the ISS does not have reliable systems and controls, which results in (a) an unreliable database of affiliates; and (b) inadequate and unreliable budgeting, treasury, and financial reporting. Such inadequate reports make it extremely difficult for authorities to make on-time and appropriate decisions. External auditors have been reluctant and, in fact, have expressed no opinion with respect to the ISS–Health financial statements; (c) inadequate inventory controls. The ISS has little control over inventories, which may lead to abuse and higher costs; and (d) inadequate information regarding the health profile of affiliates. The absence of this information leads to higher costs as services concentrate on curative measures rather than family primary care.

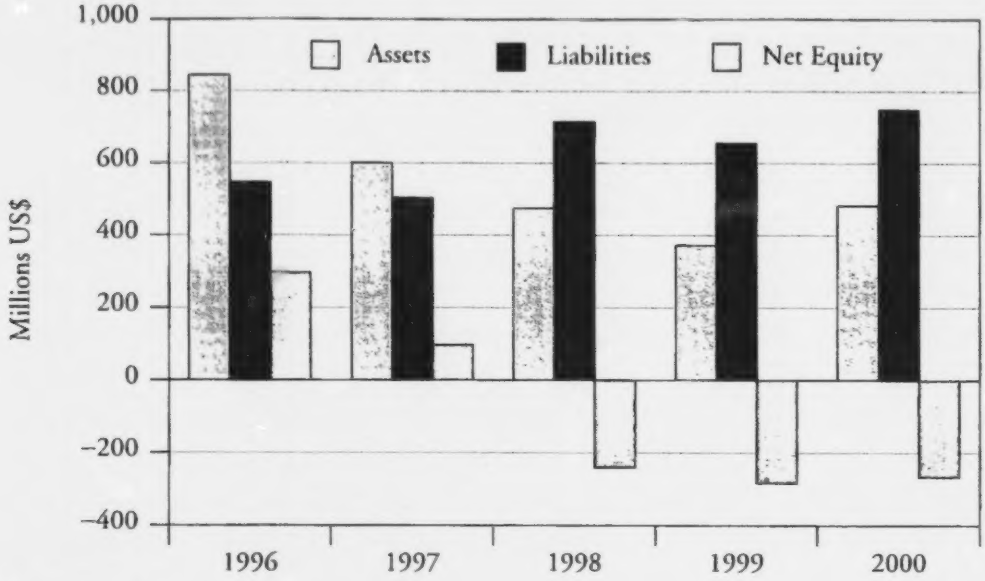
### iv. Poor Quality of Services

The ISS does not have manuals, systems, or the capacity to perform quality control of service delivery. This has led to client dissatisfaction as reflected by more than 2,100 complaints received by the Superintendency of Health in fiscal year 2000. These complaints have resulted in a massive exit of affiliates from the ranks of ISS, which dropped from over 7.5 million in 1997 to only 4.1 million in 2000, according to the National Health Superintendency. High fixed costs stemming from high labor costs, while simultaneously facing decreased revenues as a result of the exit of dissatisfied clients, have resulted in negative returns to ISS. On the basis of expenditures of US$813 million as of 31 December 2000, and a UPC of US$130, the ISS would require close to 6.3 million affiliates to break even. The ISS claims to have 5.2 million affiliates, but has been able to prove and be compensated (that is, receive risk-adjusted premiums from FOSYGA) for only 3.6 million affiliates.

### v. Noncompliance of Minimum Financial Indicators

The problems facing the ISS have led to an institution that is insolvent, illiquid, and which shows negative returns. As can be seen from Figure 6, the ISS consolidated statements for EPS and IPS show a negative equity starting in 1998. Negative equity reached a total of US$267 million as of 31 December 2000. Total liabilities increased 66 percent in real terms between 1996 and 2000, reaching a total of

**Figure 6. Balance Sheet, Consolidated EPS-IPS**



*Source:* Data of Institute of Social Security

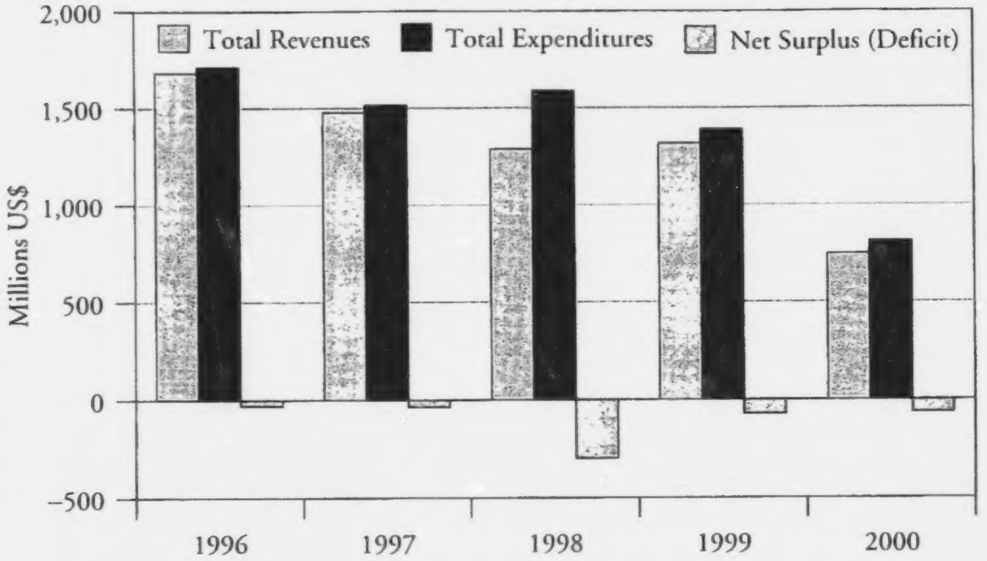
US$749 million by 31 December 2000, equivalent to 155 percent of total assets. Decree No. 882 of 1998 defines solvency margin as the amount of liquidity that an EPS must have to be able to meet obligations with third parties within 30 days. When an EPS is unable to pay such debts within 30 days, among other sanctions, it will be prohibited from adding new affiliates. Total ISS arrears with maturities beyond 30 days amounted to US$37 million as of 31 December 2000. As a result of arrears beyond 30 days, the Health Superintendency prohibited the ISS from incorporating additional affiliates until recently. The sanction also implied that current ISS affiliates may exit the ISS at any time.

The ISS has a huge liquidity constraint. Working capital requirements amounted to about US$266 million at end 2000. Current assets represented only 37 percent of required payment to short-term liabilities. The ISS consolidated EPS and IPS income statement has been presenting losses for over five years. Total losses for fiscal year 2000 amounted to about US$65 million. Cumulative losses to the same date amount to US$441 million (Figure 7). The Treasury has been covering ISS losses. However, in 2000 the government decided not to allocate more resources until the situation of ISS is resolved.

### *b) Public Hospitals*

In an effort to separate financing from provision of services, Law 100 introduced two major changes in the way the public network of providers operates. First, it

**Figure 7. Income Statement, Consolidated EPS-IPS**



*Source:* Data of Institute of Social Security

altered the way public hospitals are financed from direct budget support to demand subsidies paid by intermediary insurance entities and their affiliates. Second, it gave autonomy to public hospitals by transforming them into *Empresas Sociales del Estado* (ESEs). By 1999, around 72 percent of second- and third-level public hospitals had been converted to ESEs. The public network of hospitals, health centers, and posts is supposed to compete with and complement the private network of providers in order to sell its services to the affiliated population through the EPSs and ARSs. By the same token, since the entire population is not already covered by the *Sistema Nacional de Seguridad Social en Salud* (National System of Social Security in Health, SNSSS), the public hospitals should deliver services for those not affiliated.

Although both measures introduced by Law 100 were implemented up to a certain level, the health system is still under transition and this creates important problems at the hospital level. The transformation from supply subsidies to demand subsidies mandated by the reform has moved very slowly, if not stalled, because of the pressure to continue financing public hospitals through supply subsidies. This creates a vicious circle, where supply subsidies are not transformed into demand subsidies and the low level of resources in the subsidized regime does not allow individuals to become affiliated. In turn, hospitals have to attend a nondecreasing number of *vinculados* which, combined with low efficiency levels, results in public hospitals requesting even less transformation of supply subsidies to take place. Among the problems to be addressed are:

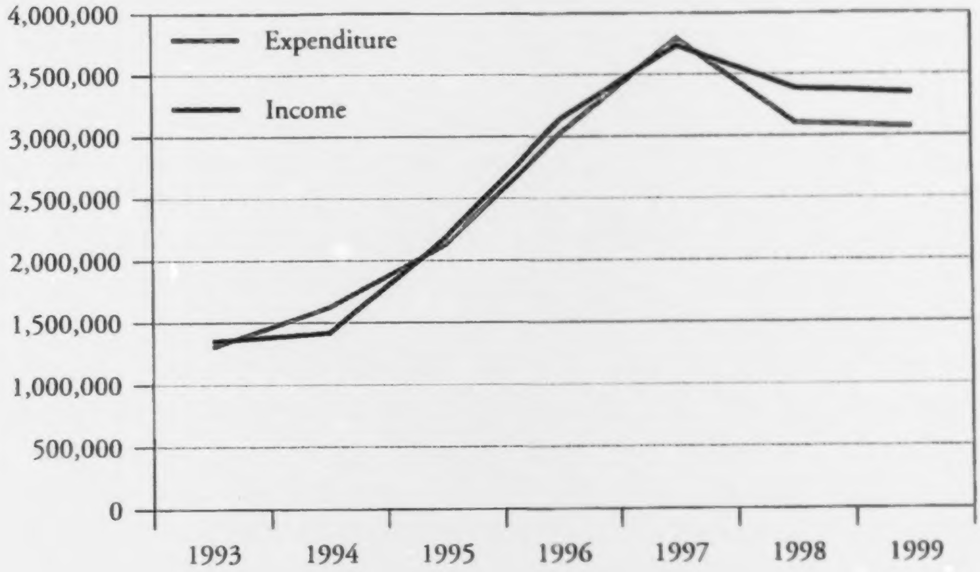
- Public hospitals have not adjusted their cost structure and efficiency levels to a competitive market, thus becoming less competitive than private health care providers and less attractive for the EPSs and ARSs. In 1998, less than one third of the total income of public hospitals was derived from selling health care services (Table 7). In the case of Bogotá, only 11 percent of total income stems from contracts with EPSs and ARSs, while the rest is provided as budget support by the *Secretaría Distrital de la Salud* (District Health Secretary, SDS) (Giedion, López, and Marulanda 2000. At the same time, expenditures for medical supplies, which in 1993 represented 33 percent of total expenditures, in 1998 represented only 19 percent, suggesting a deteriorating effect on the quality of services (Table 7).
- Labor costs have increased 40 percent since 1995 due to salary negotiations, distorting even more the cost structure of public hospitals and forcing them to request even more resources from the Treasury. In fact, as can be seen in Figure 8, resources to public hospitals increased in real terms by 148 percent from 1993 to 1999. In 1998, 68 percent of these resources were used to pay salaries (Table 7).
- Public hospital expenditures increased not only in actual value but also as a percentage of GDP. In particular, in 1996 public hospital expenditures were nearly 1.8 percent of GDP, while in 2000 they represented nearly 2.8 percent of GDP (Table 8). Taking this into account, all health expenditures in the system were 9.3 percent of GDP in 1999. The tendency has been for hospital expenditures to increase and become a larger burden on the system's finances.
- Although hospital expenditures and income have both increased, there is no evidence that public hospital efficiency has improved. Data of the 1995 Harvard Efficiency and Capacity Survey show that public facilities are less

**Table 7. Distribution of Total Expenditure and Total Income of Public Hospitals of Levels I, II, and III, 1993 and 1998**

| *Income* | *1993* | *1998* | *Expenditure* | *1993* | *1998* |
|---|---|---|---|---|---|
| Situado Fiscal | 45.0 | 33.0 | Salaries | 64.0 | 68.0 |
| Other national resources | 2.0 | 7.0 | Medical supplies | 33.0 | 19.0 |
| Rentas Cedidas | 20.0 | 7.0 | Transfers | – | 6.0 |
| | | | Debt services | – | 2.0 |
| Other departmental resources | 3.0 | 3.0 | Investment | 3.0 | 6.0 |
| Municipal resources | 4.0 | 6.0 | | | |
| Other municipal resources | – | 2.0 | | | |
| Provision of services | 22.0 | 32.0 | | | |
| Other income | – | 1.0 | | | |
| Capital income | 4.0 | 8.0 | | | |
| **Total income** | **100.0** | **100.0** | **Total expenditure** | **100.0** | **100.0** |

*Note:* Figures are percentages of total expenditure/income. Percentages add up to 100 percent vertically.
*Source:* Departamento Nacional de Planeación (2001).

**Figure 8. Public Hospital Financing, Millions of 1999 Pesos**



*Source:* Departamento Nacional de Planeación.

productive in terms of human resources than private facilities (Harvard University 1996). Moreover, many of the public hospitals operate with very low utilization rates, which implies a very high cost per hospital activity. Although resources in public hospitals have increased through supply subsidies, efficiency levels as measured by resources assigned to potential patients/users have decreased, since in 2000 there were around 9 million poor individuals affiliated to the subsidized regime, and therefore financed by demand subsidies.

- Public hospitals face a serious situation of accumulated debt from providers—a great amount from the ISS—that is aggravated by their low capacity to recover costs from EPSs, ARSs, and individuals. This, combined with the difficulty of transferring on time the resources to ARSs, puts public hospitals in a delicate position to recover debt. Therefore, to cover their fixed costs, public hospitals are forced to request increasing amounts of government resources through supply subsidies.

**Table 8. Real Public Hospital Expenditures as Percentage of GDP**

| | *1996* | *1997* | *1998* | *1999* | *2000* |
|---|---|---|---|---|---|
| Expenditure as percent GDP | 1.76 | 2.05 | 2.30 | 2.16 | 2.76 |

*Source:* Authors' calculations with data of the Ministry of Health.

**Box 1. The British Experience**

Before April 1991, hospital and community health services in the United Kingdom were financed and managed by regional and district health authorities and received global budgets, determined mainly on a historical basis. The Department of Health made allocations to regional health authorities for the running costs and the capital costs of services, and the regions made allocations to district health authorities. The allocations were based on a formula taking into account the size, demographic composition, and standardized mortality of the population in the different regions. However, the public hospital network was facing a number of problems, including low satisfaction rates among its patients, waiting lists that by 1990 amounted to over 900,000 people for the NHS (National Health System) alone, and large variation in performances among individual hospitals.

In an effort to deal with these issues a reform of the public hospital network was announced in January 1988 within the context of a wider health reform. The 1988/89 Review of the NHS mandated among other things that (a) well-managed NHS hospitals were to be given the opportunity to volunteer to become self-governing trusts within the NHS, (b) district health authorities were to be expected to operate as active purchasers of hospital services, and (c) hospitals were to be encouraged to compete for the contracts with districts. Since "money would follow the patient," hospitals would be given new incentives to satisfy patients and to minimize costs.

Implementation of the reform went ahead as planned, and by April 1999, 57 NHS hospitals and units became self-governing trusts. A second wave of 99 trusts joined the initial group in April 1992. One result of the reform was that the new "self-governing" trusts started using their greater managerial freedom to improve quality and efficiency of services. Several announced reductions in inpatient length of stay, increases in activity, and reductions in waiting times. Finally, a survey carried out soon after the reform revealed that three out of 10 patients had noticed an improvement in the service they received.

*Source:* OECD (1992).

Without restructuring of public hospitals, the system will not be able to continue successfully implementing the health sector reform, and the accomplishments on increased coverage, access, equity, and satisfaction will be lost. If public hospitals do not change their cost structure, introduce new processes to become more efficient, and continue to be financed through supply subsidies at the same pace as in the last six years, their operating cost is expected to reach US$30 billion (in 2000 dollars) in 10 years. This represents 37 percent of the 2000 GDP.

Based on the present reform efforts in 27 public hospitals, it can be inferred that the introduction of aggressive structural changes would lead to important savings stemming from efficiency gains. In particular, a reform of public hospitals that would reduce hospital costs by 10 percent would lead to a net present value of costs equal to US$27.5 billion (in 2000 dollars) in 10 years (34 percent of the 2000 GDP). Therefore, in 10 years, public hospital reform will accumulate a net savings of US$2 billion (in 2000 dollars), equivalent to 3 percent of the 2000 GDP (see also section on Public Hospitals).

### *c) Financing*

#### i. Evasion in the Contributory Regime

Evasion in the contributory regime constitutes one of the most important problems of the health system since it affects the operation of both the contributory and the subsidized regimes. As far as the contributory regime is concerned, evasion results in lower resources entering the FOSYGA Compensation Account, while in terms of the subsidized regime evasion leads to lower resources transferred to the Solidarity Account through the mechanism of the solidarity point.

One of the main reasons for evasion lies with the EPSs, the entities responsible under Law 100 for the collection of health contributions. The EPSs have weak incentives to affiliate individuals under their actual income since they have to remit contributions that exceed the sum of the UPCs of their pool of affiliates to the FOSYGA Compensation Account. In addition, they compete with each other for affiliates and thus, in some cases, in order to attract more individuals, they allow their enrollees to declare lower income, since this does not at all affect their net revenue defined by the UPC.

A study carried out by the Ministry of Health (2000) shows that in 2000 the contributory regime experienced an evasion level of COP2,052,000 million (US$836 million), which represents 2.75 percent of the 2000 GDP. Seventy-two percent of the amount of evaded contributions were attributed to underreporting (elusion), while the remainder was attributable to nonpayment (see Table 9). According to the same study, between 1997 and 2000 evasion decreased. However, the percentage attributed to nonpayment increased from 47 percent to 72 percent. Nonpayment is possibly the outcome of the severe economic crisis, which started in 1998, and had as a result a rapid increase in unemployment rates.

If evasion were eradicated the amount of additional resources entering the FOSYGA Solidarity Account would allow the affiliation of 1.2 million more people in the subsidized regime. This represents around 12 percent of the already affiliated population to the subsidized regime.[9] However, given that elimination of evasion is not easily achieved, a more probable scenario of some level of evasion would lead to

---

[9] The UPC for the subsidized regime in 2000 was equal to COP141,383 (US$57).

**Table 9. Evasion in the Contributory Regime (millions of 2000 pesos)**

| | | *Evasion* | |
|---|---|---|---|
| | *Contributions 2000* | *2000 (Percent)*[1] | *1997 (Percent)*[1] |
| Potential contributions | 5,663,504 | 100.0 | 100.0 |
| Actual contributions | 3,611,460 | 63.8 | 54.2 |
| Evasion | 2,052,044 | 36.2 | 45.8 |
| • Underreporting | 564,578 | 10.0 | 24.5 |
| • Affiliates noncontributors[2] | 421,511 | 7.4 | 6.1 |
| • Affiliates to the subsidized regime | 170,223 | 3.0 | 1.4 |
| • Pensioner noncontributors | 5,288 | 0.1 | 0.5 |
| • Nonaffiliates | 890,444 | 15.7 | 13.3 |

1. Percentages are calculated as the ratio of the amount that is evaded to the total amount of potential contributions.
2. This is the case of couples where both work but only one contributes—usually the one with lower income—while the other enjoys coverage as a beneficiary.
*Source:* Ministerio de Salud (2000).

a smaller number of affiliated poor individuals. The increased number of individuals in the subsidized regime due to the decrease of evasion would further trigger a transformation of supply into demand subsidies, since the amount of *vinculados* would be lower, thus creating even more resources for affiliating additional individuals to the subsidized regime.

Evasion appears mainly in the informal sector. In the formal sector (companies with more than 10 employees) most individuals are affiliated. However, self-employed individuals even within the formal sector tend to underreport their income base (elusion) (Plata and others 1999). According to the researchers, underreporting is due to the fact that contributions are not automatically deducted at the source of income *(autorretención en la fuente del aporte)*. In addition, EPSs appear less eager to affiliate self-employed individuals, possibly because they consider them to have a higher probability of defaulting on their contribution payments compared to public and private employees.

### ii. FOSYGA Accounts

Health sector resources have increased significantly since the 1993 reform. Although there are multiple sources of funding, the health sector relies heavily on FOSYGA's accounts. These represent the most important financing source for public health care in Colombia, comprising 46, 51, and 38 percent of total resources in the system in 1997, 1998, and 1999, respectively. As an example of the volume of transactions, in 1999, the Compensation Account received COP661,000 million (US$297 million) and paid COP397,500 million (US$178 million) in compensation.

However, two of the four accounts (Solidarity and ECAT) are part of the national budget and thus are subject to its rules and ceilings. This limits the amount of resources that could be used to increase affiliation in the subsidized regime every fiscal year. As can be seen in Table 10, the amount of resources that were part of the national budget in 2000 equaled half (49.9 percent) of the total available FOSYGA resources. This situation has created a problem of accumulated resources from one fiscal year to the next.

Furthermore, the use of these resources for purposes other than originally intended has frequently been allowed through legislation. That is, in any given fiscal year exercise, direct transfers are made to public hospitals through supply subsidies instead of increasing health insurance affiliation. In the case of ECAT, such an action could be justified by the fact that the resources in this account can be used for the financing of emergency services for catastrophic events. However, it cannot be easily established that the ECAT resources are used exclusively for financing such events and not for other hospital operations. From 1996 to 1999, a total of COP646,500 million (in 2000 pesos) (US$263 million), or 51.4 percent of the total available FOSYGA resources for 2000, were transferred to public hospitals through supply subsidies after passing laws changing the destination of those accumulated surpluses.

At present, there is an accumulated reserve of COP192,500 million (in year 2000 pesos) (US$78 million) in the investment portfolio, which had not been allowed to be transferred to public hospitals before 2000. These resources should be channeled to increase affiliation to the subsidized regime. If that happened, 1.3 million new affiliates would enter the subsidized regime.

### iii. Delays in Transfers from National Territories to ARSs and Ultimately to Health Care Providers

Figure 9 describes the allocation of resources between the subsidized regime and hospitals as defined by Law 60 and Law 100. Four general types of resources are distinguished: the *Situado Fiscal*, the *Rentas Cedidas*, Participations, and FOSYGA. The first three preexisted Law 100, while FOSYGA was created by it. As seen in Figure 9, the combination of the two laws has resulted in a very complicated system of resource allocation both for increasing coverage in the subsidized regime and hospital financing.

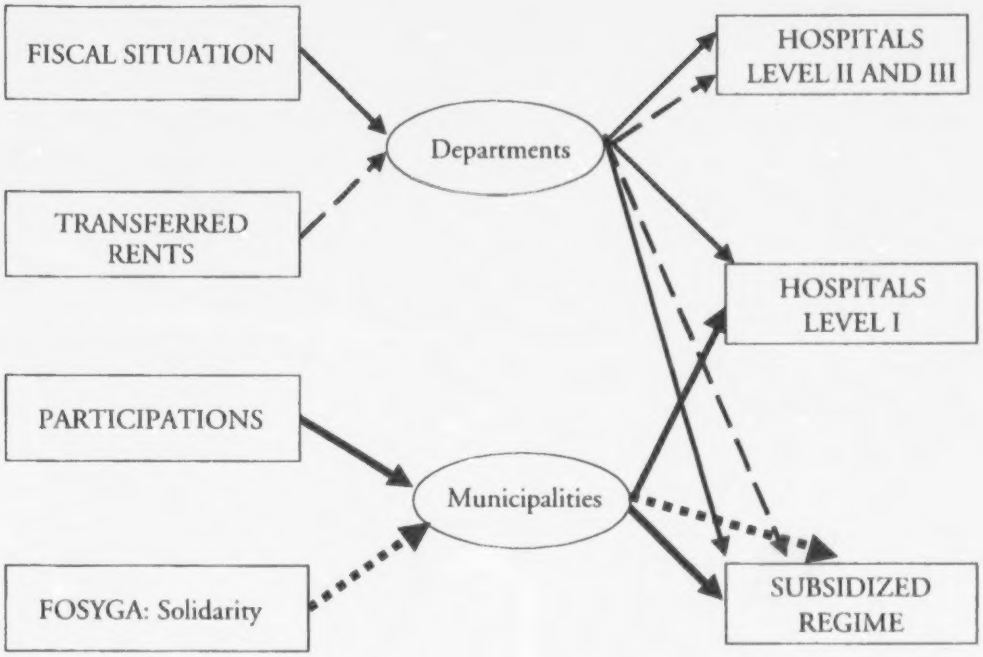
With respect to increasing insurance coverage in the subsidized regime, resources are transferred to the national territories (departments and municipalities), which in

**Table 10. FOSYGA: Annual Budget FY 2000 (pesos)**

| *Account* | *Final Budget Approval* | *(Percent)* |
|---|---:|---:|
| Promotion | 69,799,127,640 | 5.5 |
| Compensation | 567,145,845,586 | 45.0 |
| Solidarity | 502,182,426,000 | 39.9 |
| ECAT | 119,264,211,000 | 9.5 |
| **Total** | **1,258,391,610,226** | **100.0** |

*Source:* Accord 160 de 2000 of Consejo Nacional de Seguridad Social en Salud.

**Figure 9. Allocation of Resources—Law 60**



turn transfer resources to the ARSs. These resources are used by the ARSs to pay for the services delivered by public and private hospitals to their affiliates. However, given the complicated nature of the system, transfer delays from the national territories to the ARSs have been observed. These delays have resulted in an accumulated debt from the national territories to the ARSs and, in turn, from the ARSs to the health care providers. The situation has been further aggravated by the fact that there was a period during which ARSs were subject to minimum controls, which allowed incidences of corruption to be observed. From April 1999 to September 2000, national territories owed COP57,000 million (US$23 million) to the ARSs, while ARSs' debt toward public and private providers was estimated to be COP37,000 million (US$15 million).

To solve this problem, Decree 46/2000 was issued allowing deduction of territorial debt directly from the resources to be transferred to national territories; that way all arrears will be paid before those resources reach the territorial entities. However, given that there was no agreement among national territories, ARSs, and health care providers on the level of the debt, neither the Ministry of Health nor the Health Superintendency has been successful in implementing this decree.

In addition, as Figure 9 shows, there is no clear distinction with respect to which territorial entity (department or municipality) is responsible for financing the subsidized regime (demand subsidies) and which the hospital network (supply subsi-

**Table 11. Situado Fiscal Transformed into Demand Subsidies (millions of 1999 pesos)**

| | *1993* | *1994* | *1995* | *1996* | *1997* | *1998* | *1999* |
|---|---|---|---|---|---|---|---|
| Total S.F. for health | 686,618 | 794,585 | 855,463 | 998,550 | 1,060,628 | 1,084,110 | 1,218,764 |
| S.F. allocated to hospitals | 521,453 | 723,076 | 742,548 | 960,679 | 1,063,777 | 1,015,605 | 1,003,721 |
| S.F. available for transformation[1] | 165,165 | 316,844 | 379,872 | 502,726 | 550,078 | 582,374 | 723,049 |
| S.F. actually transformed | – | – | – | – | 100,573 | 130,168 | 195,716 |

1. This is the amount of *Situado Fiscal* available for transformation according to Law 100 of 1992 and Law 344 of 1996.

*Source:* Departamento Nacional de Planeación.

dies). Thus, in many cases territorial entities would take "arbitrary" decisions to assign resources to one cause but not the other. This has contributed to the incomplete transformation from supply subsidies to demand subsidies, and therefore the slowdown of insurance affiliation in the subsidized regime. Table 11 shows that territorial entities transformed a smaller amount of the *Situado Fiscal* to demand subsidies than the one available for transformation. On the contrary, they used most of their resources for payments to hospitals. In 1999 only 27 percent of the *Situado Fiscal* available for transformation was actually transformed. If the total amount available for transformation in 1999 were used for increasing insurance coverage, the number of individuals entering the subsidized regime would be equal to 5.1 million.[10] This is around 3.7 million individuals more than the number that entered with the *Situado Fiscal* actually transformed.

The central government, recognizing the complexity of the financing of the subsidized regime, recently approved Law 715, which reforms Law 60 and changes the allocation of territorial transfers (for more details see Section IV. Government Response and Current Reforms).

### iv. Definition of the Health Benefit Package of the Contributory Regime

Originally, the health insurance and health care system was designed for a limited health benefit package that could be expanded through time according to resources available and increases in coverage. However, the regulation introducing the health benefit package of the contributory regime *Plan Obligatorio de Salud* (POS) at the beginning of the implementation of the reform, defined it as a very comprehensive health care package, excluding only a limited number of activities, interventions, and procedures.[11] This situation has been maintained until the present and has been worsened by legal pressure exercised by affiliates. The ample range of interventions covered in the POS has created an imbalance between what is legally covered by it and therefore expected by the affiliates, and what can be financed by the UPC.

---

[10] The UPC for the subsidized regime in 1999 was equal to COP128,530 (US$57). However, for comparability reasons, for this calculation we use the UPC for the subsidized regime for 2000, equal to COP141,383 (US$57).

This situation is further worsened by decisions of the Constitutional Court in favor of individuals that demand the provision of health care services that are excluded by the POS. The Constitutional Court bases these decisions on the Constitutional "right to life." Individuals who require health care services not covered by the POS are entitled to file a *tutela* (lawsuit) before the Constitutional Court demanding the provision of the service to be covered by the insurer or eventually by the health system. In turn, judges on the Constitutional Court have taken decisions that demand the allocation of national resources in order to finance health services not covered by the POS and, in some cases, those need to be provided abroad.

Reliable data with respect to the cost of the lawsuits for the Colombian health care system are not available. According to a study carried out by the *Departamento Nacional de Planeación* (National Department of Planning, 2001) a great number of lawsuits have been filed in order to acquire health care services, with the ISS affiliates filing the greatest number. For example, in 1999, the number of lawsuits against the ISS was 389 for April in Bogotá, and 377 in Cali and 1,706 in Medellin for February.

## *d) Health Insurance Coverage and Targeting*

### i. The Confusion Between a SISBEN Classification Document and Affiliation

According to data of the National Health Superintendency, one in three individuals who is an eligible member of the subsidized regime does not have insurance coverage. A reason frequently cited in the political arena for not achieving universal coverage for the poor is lack of resources. As a result, municipalities do not have sufficient funds to carry out interviews with households to determine their SISBEN level and/or to cover their UPC.

---

[11] These activities, interventions, and procedures are defined in Accord 1938 of 1994 and include (a) cosmetic surgery; (b) nutritional and varicose vein treatment for cosmetic reasons; (c) infertility treatment; (d) treatment for fatigue and insomnia; (e) specific organ transplants; (f) psychotherapy and psychoanalysis at an individual level or for a prolonged period; (g) orthodontic and prosthetic treatment for dental care; (h) elastic means of support, corsets, girdles, wheelchairs, insoles, and orthopedic shoes; (i) treatments that are not recognized by the international medical community or that are experimental; (j) treatments that use experimental medicines or substances, or medicines or substances that are not included in the *Manual de Medicamentos, Esenciales y Terapeutica*; (k) curative treatments for chronic and degenerative diseases; (l) cancer and traumas that are in a terminal stage; (m) educational and vocational activities that take place during the rehabilitation phase and are not strictly necessary in medical terms; and (n) activities that are not included in the *Manual de Actividades, Intervenciones y Procedimientos*.

However, as already seen in earlier parts of this Chapter, and as summarized in Table 12, the transformation of the full amount of available resources of the *Situado Fiscal* and the use of the accumulated FOSYGA reserves for increasing coverage can expand the subsidized regime by 5 million individuals. This number exceeds the total of nonaffiliated poor individuals (around 4.4 million).[12] Furthermore, if we add to these actions the elimination of evasion, the number of new affiliates in the subsidized regime increases to 6.2 million. Needless to say, very specific efforts need to be carried out to "recuperate" financial resources in the system to successfully increase affiliation of the poor. Developing and implementing such strategies are not impossible tasks. Having said this, it should be acknowledged that increasing health insurance affiliation should be addressed not only by ensuring the availability of resources, but also on the demand side, by treating actual affiliation separately from SISBEN characterization. Currently, individuals eligible for affiliation to the subsidized regime appear to lack basic information with respect to the affiliation process. One aspect causing persistent confusion appears to concern SISBEN and affiliation to an ARS.

The majority of the Colombian population believes that being classified as SISBEN 1 or 2 is synonymous with affiliation to the subsidized regime. However, this is not correct since, after acquiring documentation that proves the SISBEN level of the individual (henceforth SISBEN Classification Document, SCD), he or she has to subscribe to an ARS. In turn, the ARS signs a contract with the rele-

**Table 12. Number of New Affiliates in the Subsidized Regime by Type of Action**

| *Action* | *No. of New Affiliates in the Subsidized Regime* |
|---|---|
| Situado Fiscal | 3.7 million |
| FOSYGA | 1.3 million |
| Evasion | 1.2 million |
| Situado Fiscal + FOSYGA | 5.0 million |
| Situado Fiscal + FOSYGA + Evasion | 6.2 million |

*Source:* Authors' calculations.

---

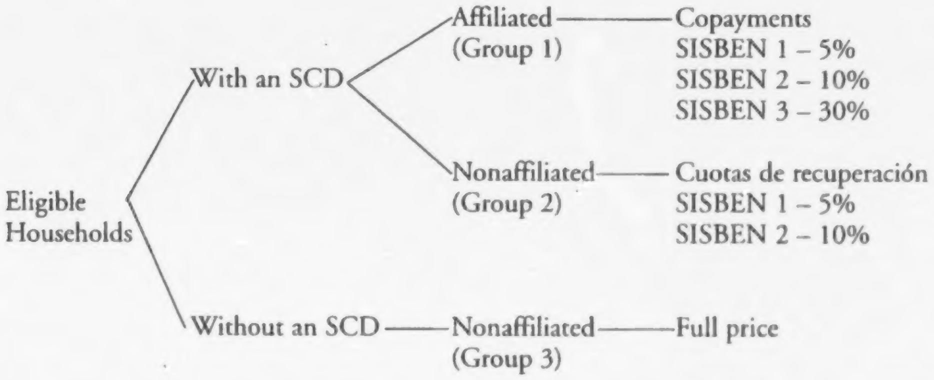
[12] The number of individuals that are not affiliated to the subsidized regime as a percentage of the NBI population (NBI stands for *Indice de Necesidades Básicas Insatisfechas*, Index of Unsatisfied Basic Needs) appears to be higher than 32 percent. According to estimates of researchers at the University of Antioquía, this percentage is equal to 38 percent, or 5.8 million people. However, this number is still lower than the 6.2 million individuals who could have entered in the subsidized regime provided the actions mentioned in this section had been taken.

vant departmental health authority for each of its affiliates. After this contract is signed, the individual is considered to be an official member of the subsidized regime. Part of this confusion can be attributed to the complicated nature of the affiliation procedure.

An additional reason is that for members of SISBEN levels 1 and 2 households, the important factor for being charged lower health care prices is not affiliation, but possession of an SCD. This is because public hospitals charge the same copayment to individuals with an SCD of SISBEN levels 1 or 2, irrespective of whether they are affiliated. The only people paying the full price of the service are individuals who do not have an SCD (see Figure 10).

The fact that the majority of the population cannot distinguish between an SCD and affiliation results in eligible individuals being unable to exercise pressure, especially on municipal mayors, for their inclusion in the subsidized regime. Individuals also face difficulties in understanding the content of the health care benefit package and are not aware of the fact that they can choose their insurance

**Figure 10. SISBEN Classification Document Affiliation and Health Care Copayments in the Subsidized Regime**



*Note:* Households having the characteristics of SISBEN level 1 or 2 may or may not have an SCD. By SCD, we refer to any item that proves the SISBEN level of the household, such as a card, an official document, or a *carnet* that ARSs provide to affiliates. The group can be further classified into households that have subscribed to an ARS (affiliated—Group 1) and households that have not (nonaffiliated—Group 2). The group of households without an SCD is clearly nonaffiliated (Group 3). According to the law, the main difference between affiliated and nonaffiliated individuals with respect to health care charges is that the former pay a copayment, while the latter pay the full cost of the service. Nevertheless, hospitals have used the SCD as proof of socioeconomic status on which to base copayments not only for affiliated individuals, but also for nonaffiliated individuals who have a classification document (Group 2). The copayments charged to the nonaffiliated who have an SCD are called *cuotas de recuperación* and are calculated on the same basis as the copayments charged to the affiliated. That is, SISBEN level 1 individuals pay up to 5 percent of the price of the health care service, while SISBEN level 2 individuals pay up to 10 percent. Therefore, for members of SISBEN levels 1 and 2 households, the important factor for being charged lower health care prices is not affiliation, but possession of an SCD.

entity and health care provider. Information campaigns carried out by the Ministry of Health are rather limited in number and unfocused. Empowering the poor through targeted communication campaigns is crucial for reaching higher affiliation rates in the subsidized regime and for increasing utilization rates among those insured.

### ii. The Problem of Identifying the Poor

The conditions for eligibility in the subsidized and contributory regimes are not mutually exclusive. According to Law 100 and the legislation amending it, eligible affiliates to the subsidized regime are members of households of SISBEN levels 1 and 2. After complete coverage of the population at SISBEN levels 1 and 2 in a municipality, further beneficiaries can come from the SISBEN level 3 population, starting with households of lower to higher SISBEN scores.[13] On the other hand, an individual should be a member of the contributory regime if he or she is a public employee, has a labor contract, is a pensioner, or is self-employed and receives more than twice the monthly statutory minimum salary. This means that if there is a household of SISBEN level 1 or 2 in which either parent fulfils the conditions of the contributory regime, then the members of the household are obliged to join this regime regardless of the SISBEN level of the household.

However, evidence shows that individuals who fulfil the conditions of the contributory regime and/or belong to SISBEN levels that are not eligible for subsidies—that is SISBEN levels 4 to 6—are members of the subsidized regime (Ministerio de Salud 2000; World Bank 2001; Panopoulou 2002).[14] The reasons explaining this phenomenon are:

- There are individuals who manipulate their entrance in the system through connections with municipal authorities. In most cases, the mayor of the municipality has full responsibility for applying, implementing, and administering the SISBEN program. In addition, he or she is the one who contracts the ARSs responsible for affiliation in the municipality, and in cases of decentralized municipalities with primary health care facilities, he or she is also accountable for their operation. This concentration of power, especially in rural areas, allows the mayor, under specific circumstances, to act unilaterally.
- There are individuals who are untruthful during the interviews defining the household's SISBEN level. This is enabled by the fact that, at present, the variables of the SISBEN index and the weights assigned to each of them are publicly known. In addition, there are a number of variables that are very difficult for the interviewer to verify (for example, income level).
- Due to its complex nature, the SISBEN index cannot be easily updated by the authorities. Hence, when the socioeconomic situation of a household

---

[13] See Acuerdo 77 of 1997.

[14] See also footnote 6.

improves, there is no incentive among its members to reveal this improvement and lose the subsidy.
- The weights of the SISBEN index were calculated using 1992 data that no longer reflect the socioeconomic situation of the individuals.

In addition, the fact that there are serious limitations in the beneficiary databases for both the subsidized and the contributory regime increases the problem of identifying the poor.

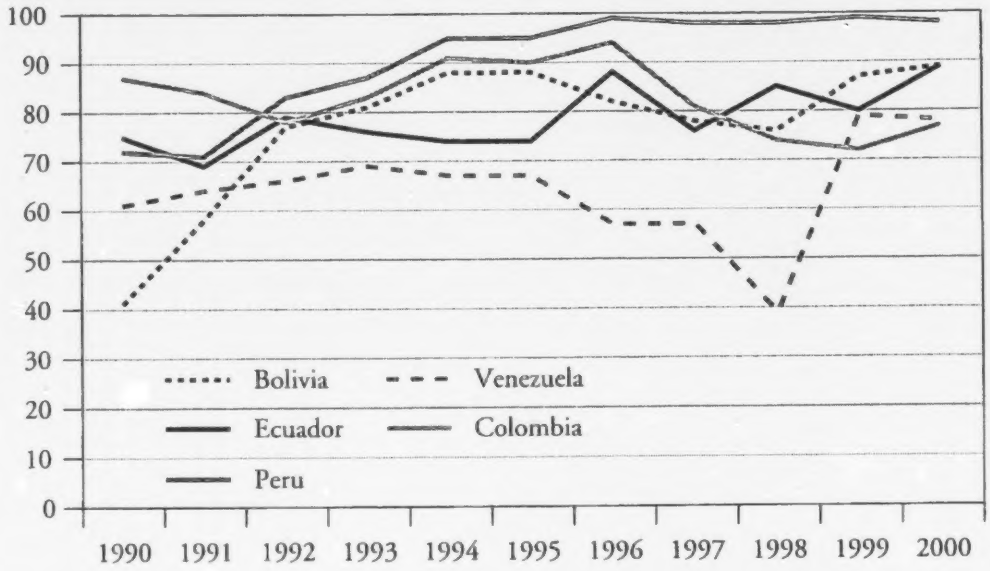
### *e) Public Health: The Issue of Vaccination*

One of the most important public health issues in Colombia is the weakening of the country's system of protection against communicable diseases. In the past, Colombia was a leader in prevention activities, and the Ministry of Health established the *Programa Ampliado de Inmunizaciones* (Expanded Program of Immunization, PAI) as a national priority. During the 1980s and early 1990s impressive gains in vaccination coverage levels and disease prevention were achieved. In 1995, Colombia achieved what few countries in the Americas have accomplished: coverage levels for all routine vaccines reached or surpassed 90 percent.

However, since 1997, coverage levels for all vaccines have declined to below 80 percent. Coverage against measles declined from 95 percent in 1996 to 78 percent in 2000. In 1996, the coverage for three doses of diphtheria–tetanus–pertussis vaccine (DTP3), often considered the key indicator of PAI performance, was the highest in the Andean Region, at 94 percent. However, in 2000, levels fell to 77 percent, the lowest in the Andean Region (Figure 11). The trend in coverage levels is indicative of a general decline in the PAI. The program experienced decreases in staff, training, and supervision. The consequence is not only a decline in immunization efforts, but also reduced surveillance, which currently may not be sufficiently sensitive to detect, in a timely manner, the reemergence of viral circulation.

The underlying causes of the decline in the performance of the vaccination program are complex and probably due to many factors, one of which is inadequate funding. The impact of inadequate funding on the vaccination effort has been reflected in shortages in personnel and supplies. The combination of staff turnover and the lack of funds for supervision and training has resulted in a situation where inadequately trained and inexperienced staff fail to follow current vaccination guidelines and practices. Equally important are institutional factors. Weaknesses in the design of the decentralization and health care reforms share part of the blame for the weak performance in vaccination activities over the last few years. It is not clear which entity at what level (national or territorial) is responsible for the implementation of the vaccination program. At the same time, it is possible that the health sector reform may have placed more emphasis on curative services and the provision of healthcare for the poor than on preventive services.

**Figure 11. Coverage Levels for Three Doses of DTP Among Children Younger Than 1 Year of Age, Andean Region, 1990–2000**



## IV. Government Response and Current Reforms

In an effort to address these health issues, the government of Colombia has recently taken a number of important steps. First, it has introduced reforms of the system of allocation of resources between the financing of the subsidized regime and hospitals, and of the system of targeting individuals in need of public subsidies. Second, it has initiated restructuring plans for the ISS–Health and the network of public hospitals, and has started to take measures to tackle the immunization problem.

### i. Sectoral Allocation of Territorial Transfers

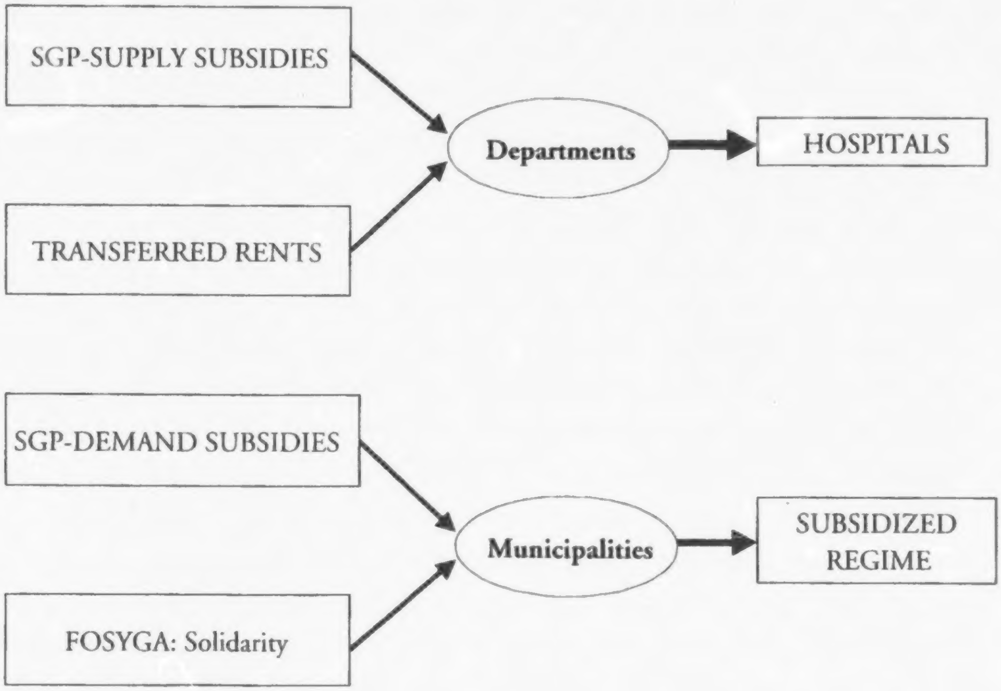
One result of passage of the *Acto Legislativo* of 2001 is the disappearance of the *Situado Fiscal* and *Participaciones* in the current national budget. Under the new act, all transfers form part of a unified system entitled *Sistema General de Participaciones* (General System of Participations). Going a step further, Law 715 of December 2001, which reforms decentralization Law 60 of 1993, distributes the resources of the General System of Participations among education, health, and other social sectors. About 24.5 percent of total resources are used to finance the health sector, 58.5 percent are used to finance the educational sector, and 17 percent are used to finance other social sectors. Within the health sector, resources are further distributed among the financing of increasing insurance coverage in the subsidized regime (demand subsidies), public hospitals (supply subsidies), and public health. Health sector resources have increased from COP2,514,0000 million (US$1 billion) in

2001 under the old system to COP2,855,000 million (US$1.1 billion) for 2002 under the new system—that is, a 13.5 percent increase (*Gaceta del Congreso* 2001).

Law 715 is expected to promote transparency and accountability in the system, and increase the flow of transfers from departments to hospitals and from municipalities to ARSs. As Figure 12 shows, SGP resources are destined to both departments and municipalities in the form of, respectively, supply and demand subsidies. However, the main difference with Law 60 is that now each authority is responsible for a single goal. Departments are responsible for financing the hospitals, while municipalities are responsible for increasing health coverage in the subsidized regime. This will allow greater accountability in the system if these goals are not met. The *Rentas Cedidas* are still received by the department, as they were under the old system of transfers, but they are now used exclusively for financing hospitals. On the other hand, the Solidarity account of FOSYGA remains as it was in terms of recipients and use.

The distribution of resources among the financing of affiliation and public hospitals is based on the number of affiliates and *vinculados*. Resources destined for the financing of affiliation are expected to cover the UPCs of the already affiliated population and provide for the inclusion of a predetermined number of new affiliates. Similarly, resources destined for the financing of public hospitals are calculated based on the number of *vinculados* in each department. In the area of public health, criteria such as the vaccination coverage rates are used. The distribution of resources

**Figure 12. Allocation of Resources—Law 715**



between the subsidized regime and public hospitals will remain the same for two years after the law has been approved, and afterward the transformation of supply to demand subsidies is mandated. The transformation will then be based on an adjustment of the distribution formula to the number of individuals who have entered the subsidized regime and the number of *vinculados* in 2003. Although the new law introduces positive changes in the way resources are distributed, it does not define the number of new affiliates entering the subsidized regime or the way that the transformation of supply to demand subsidies will take place.

### ii. Improving the Targeting of the Poor

Furthermore, the government has initiated a reform of the system of targeting individuals in need of public subsidies. The guidelines for the reformed targeting system were approved by the *Consejo Nacional de Política Económica y Social* (National Council of Economic and Social Policy, CONPES) in November 2001 and include (a) adjustment of the instrument of identification (the SISBEN index) to capture regional differences and dynamic aspects and a strategy for the adoption of the new instrument, (b) a system of quality control and centralized monitoring through regular evaluations of the SISBEN surveys and punitive measures in cases where the municipality appears to have an identification error greater than 15 percent, and (c) strengthening of supervision and administration at the local level. With respect to the first guideline, the CONPES document provides a description of the variables, which form part of the new SISBEN index, although no information is given with respect to the exact subcategories each variable has and the weights assigned to them. This is to avoid manipulation of the surveys that has occurred in the past. The CONPES also recommends that the SISBEN instrument be used by social programs other than the subsidized regime (*Red de Apoyo Social, Becas Paces, Instituto Colombiano de Bienestar Familiar* [Colombian Family Welfare Institute, ICBF], *Instituto Nacional para la Vivienda de Interes Social y la Reforma Urbana* [National Institute of Social Interest, Housing, and Urban Reform, INUBRE], and so forth), and should be expanded in terms of individuals and families that have completed the survey, giving priority to poor municipalities.

### iii. ISS–Health

In an effort to deal with ISS financial problems, the government has agreed on a restructuring plan for the ISS–Health services. The main objectives of this plan are to improve quality of services to affiliates, eliminate inefficient supply subsidies to ISS–Hospitals (ISS–IPS), and limit fiscal costs to the national government. The ISS–Health is currently facing both "stock" and "flow" problems that need to be addressed. With respect to its existing accumulated deficit, the program includes (a) transferring resources to the ISS only after successful completion of the renegotiation of collective bargaining agreements with its labor union, (b) lifting the sanction applied by the Health Superintendency prohibiting new affiliation to the ISS after the underlying causes of the sanction have been resolved, and (c) withholding compensation transfers from the FOSYGA to the ISS until more accurate information on the number of its affiliates has been provided. To resolve the "flow" problem, the government aims to increase revenues and decrease costs. Measures for reducing costs include the restructuring of accumulated debt, rationalizing clinics and ambulatory health services, and improving contracting mechanisms with own and external health care providers. Measures for increasing revenues include better collection of contributions by affiliates through reforms to the current system of self-estimated contributions, increased collections of arrears, and enrolling more affiliates after the sanction imposed by the Health Superintendency is lifted.

To date, the ISS has renegotiated 97.4 percent of its COP453,000 million (US$184 million) debt with IPSs and laboratories. It is worth mentioning that this is the debt of ISS until 30 July 2001. The ISS is expected to pay 5 to 6 percent of its debt at the moment of signing the agreement, 14 percent by December 2001, and then fractions of 20 percent from February to June 2002. As a result of ISS's debt renegotiation, the Health Superintendency lifted its sanction, and in December 2001 the ISS started the process of affiliating new members. With respect to the quality of service, the ISS was facing waiting lists of 23,000 individuals for elective surgery, 80 percent of whom were with ISS–IPS, and the rest were with external providers. Within its restructuring program the ISS has reduced the number of individuals on waiting lists by 40 percent (around 9,500 cases). In addition, given the completion of the renegotiation of collective bargaining agreements between the ISS and its labor union, which provides annual savings of COP119,300 million (US$49 million), the central government has transferred COP500,000 million (US$203 million) to the institution for 2001. The central government has agreed to transfer the same amount of money to the institution in the second half of 2002, and has also committed itself to pay pension benefits that became effective before the 1993 reform.

### iv. Public Hospitals

As a response to the problems faced by the public hospital network, the government is committed to carrying out a reform and restructuring program. The objectives of this program are to guarantee the financial viability of public hospitals and improve the productivity in health service delivery. To achieve the first objective, the program contains actions to reduce costs, which include (a) reforming the personnel structure, (b) resolving accumulated debts, and (c) renegotiating collective bargain agreements with hospital unions. To achieve the second objective, the program includes actions such as (a) reaching agreements between territorial entities and hospital directors to advance long-lasting restructuring and to develop functional health service networks, and (b) identifying and analyzing existing information regarding supply and demand for health services in different regions in order to better define plans for managerial and technological improvements. Preliminary results from a pilot program aiming to restructure 27 hospitals (out of a total of about 170 medium- and high-complexity public facilities) administered by the Ministry of Health appear to be positive—although timid: in one year hospital costs have been reduced by 5 percent.

### v. Immunizations

In collaboration with the Pan-American Health Organization (PAHO), national authorities conducted a detailed evaluation of the entire national immunization program. National authorities have now allocated sufficient funds to purchase vaccines and syringes to cover 2002 needs, including a national vaccination campaign planned for May 2002. At the same time, Law 715 clearly states that the central government is responsible for guaranteeing the provision of vaccines and syringes through the PAI. Equally noteworthy, the MOH and the *Instituto Nacional de Salud* (National Institute of Health, INS), in collaboration with the local PAHO office, is developing a detailed needs analysis for the national cold chain to ensure adequate storage and transport of vaccines. Moreover, the MOH is developing performance indicators for monitoring vaccination coverage levels at the municipal level, and has begun to address the development of a functional information system for the collection, analysis, and dissemination of information on vaccination activities. The above indicators will be used to certify compliance by the private sector with vaccination guidelines, and the information system will monitor the number of vaccine doses given by provider and by geographic location.

## V. Policy Alternatives and Recommendations

Colombia's reform has affected the behavior of all actors in the health sector. It has altered the relationship between the population and insurers, insurers and providers, and providers and patients. Among its achievements can be included increases in insurance coverage, equity, and access to health care. The important results that the reform has demonstrated can be further supported by addressing the challenges and issues mentioned throughout this Chapter. As already demonstrated, actions that will result in the decrease of evasion, the full transformation of supply to demand subsidies, and the use of the resources of the FOSYGA Solidarity Account for exclusively increasing coverage, could generate an increase of the number of poor entering the subsidized regime by around 6.2 million individuals. Adding to this number those already affiliated to the subsidized regime (9.5 million people) will effectively mean full coverage for the poor. Given that the contributory and subsidized regimes operate like communicable vessels, the same action can have double effects. Resolving the problems of evasion and elusion, apart from increasing the resources of the FOSYGA Solidarity Account, can bring a balance to the Compensation Account, as well. To this end, the restructuring plan for the ISS can also assist. The new system of allocation of sectoral transfers will ease the flow of resources, and health care providers, being at the end of the chain, will not have to face delays that jeopardize their operation. At the same time, the restructuring plan for public hospitals will ensure that they will be ready to compete with the private sector and offer efficient services of good quality. Finally, addressing issues of public health, such as the immunization program, will restore epidemiological surveillance to a level guaranteeing protection against communicable diseases.

### a) The Social Security Institute

Recognizing the very difficult situation facing the Social Security Institute (ISS), the Colombian government has entered into an agreement with the ISS under which it has restructured its debt up to 30 June 2001, reduced its list for elective surgeries by 40 percent, and renegotiated with its labor union on the level of benefits. The savings achieved through the new collective agreement are estimated to be around COP119,300 million (US$49 million). On the other hand, the government has agreed to provide to the ISS COP1,000,000 million for 2001 and 2002.

Given the importance of the ISS to the health sector as a whole and to the implementation of health reform, a strong commitment from the government and from the ISS is necessary to successfully address the ISS situation. Several scenarios seeking solutions for the ISS have been considered. What is important to note is that each solution or action has an up-front cost to the Treasury, and necessarily an opportunity cost that also must be taken into account. Analysis of all options requires consideration of the critical balance among feasibility, timing, and the imposed cost to society. To continue the ISS as it exists, but slowly letting it "die" by prohibiting new affiliation and by allowing or encouraging present affiliates to choose another EPS, although politically very appealing, would have a specific long-term cost larger than the one now faced and that would have to be paid in its entirety when all arrears need to be cancelled in the future. The only way such an option is worth considering is if there are specific measures that prevent the Treasury from being forced to financially "rescue" ISS every step of the way. Otherwise, what this option does not only postpones more radical options, but increases the accumulated cost to Colombian society. Since the ISS situation is so critical, any solution that does not pay all arrears and does not deal with the root of the problems up front would not alleviate the financial problems of the sector. In fact, it might create a higher cost for Colombian society that must be paid by future generations. By not deeply reforming the ISS, the country is paying a high price since the Treasury would continue to be called upon to subsidize ISS debt, and ISS beneficiaries would receive health services from overstaffed and inefficient health providers.

The political and social constraints on implementing a first-best solution to fix ISS problems are acknowledged by the authors, and the actions already taken by the government are by no means underestimated. However, to improve the health sector by reforming the ISS, much more radical solutions need to be proposed and implemented. Two scenarios provide evidence that much more radical action needs to be taken to make the ISS viable and to lessen its burden on fiscal expenditure. A detailed discussion of these options follows.

### i. Option 1: Fully Separate Financing from Delivery

This option calls for separating ISS insurance (ISS–EPS) and provision (ISS–IPS) into different entities operating at arms length. For the option to be operational the EPS must be able to purchase health services at competitive market prices. Similarly, the ISS–IPS must become competitive to survive in the marketplace. It is worth pointing out that under the current agreement between the ISS and the central government no such incentives are given since strict priority is given to the ISS–IPS. That is, the ISS–EPS is allowed to purchase services only by the ISS health care facilities, except in cases where the latter do not possess the necessary infrastructure.

To execute this option, a number of actions are required. First, the ISS should be divided into four separate entities according to responsibilities: (a) Health Insurance or EPS, (b) Health Provisioning or IPS, (c) Workers' Compensation, and (d) Pensions. Second, fully auditable accounts should be produced, and external auditors must be in a position to express an opinion about these accounts. The next step would be the closure of the presently joined ISS–Health Insurance (EPS) and Health Provisioning (IPS), followed by the creation of a fully restructured EPS. Under this option, the central government would need to finance all accrued severance and pension obligations, amounting to US$1.7 billion, and hospitals would be evaluated on the basis of ability to compete. Staff would be rehired only in sufficient numbers to operate competitive hospitals, and for the EPS. Under this reform option, the ISS would also remain as a pension administrator and as a Workers' Compensation insurance administrator, each of which would be managed separately. This option would (a) allow for better quality of service to affiliates. Affiliates would continue to have a choice of EPS. At the same time, the ISS–EPS would be able to choose the network of providers according to the affiliates' demand and at competitive market prices. Under no circumstance would the ISS–EPS be forced to purchase services from the ISS–IPS, (b) would eliminate inefficient supply subsidies, and (c) would limit fiscal costs to the government. This option would stop increasing actual and contingent liabilities.

Among the conditions set for the restructured EPS would be (a) operating with minimum required staff; (b) developing operational manuals, standard contract agreements with IPSs, a minimum required database for affiliate information, (including health profiles), internal control manuals and practices, quality control manuals and practices, and a medium-term business strategy; and (c) negotiating new labor contracts, and signing contracts with the provider network. Along the same line, a fully restructured ISS delivery (IPS) would also be created including (a) stopping all supply subsidies; (b) determining competitive hospital and ambulatory services (CAAs); (c) closing and/or transforming noncompetitive hospitals and CAAs; (d) rehiring minimum required staff in hospitals; (e) developing business agreements with private EPSs to sell services; and (f) developing best administrative practices for competitive hospitals and CAAs, including minimum performance indicators.

A fiscal impact estimate for this reform option shows savings equivalent to 2.4 percent of the 2000 GDP (Appendix Table A.1). In the case of no reform, it is assumed that a total of US$250 million per year would be transferred by the Treasury to ISS to finance operating losses. This is roughly the amount that the ISS and the central government have agreed on for 2001 and 2002. In the case of reform, the following six assumptions are made for the purposes of this analysis:

- There are no additional operating losses, while the return from following this option is the savings of US$250 million per year.
- Severance payments of US$305 million are paid in year 1.
- Additional debts of US$150 million are paid in year 1.
- An additional benefit of US$600 million is paid to workers to accept labor convention renegotiations. This extra benefit may be used as working capital by workers that accept retaining the health assets as severance payments.
- Operational net flows were estimated for EPS and IPS using a model developed by ISS. Revenues for the reform case are the operating surplus (deficit) from consolidating the ISS–IPS and the ISS–EPS plus the elimination of Treasury subsidies of US$250 million per year of the no-reform option.
- It is assumed that new staff enter with only legal pension benefits and are not eligible for benefits under current ISS labor agreements, and that the EPS purchases services at competitive market prices.

### ii. Option 2: Keep ISS as Pension and Worker's Compensation Insurance Administrator Only

This option calls for closing all ISS–health services, both ISS insurance (ISS–EPS) and provision (ISS–IPS). The ISS would remain as a pension administrator and as a Worker's Compensation insurance administrator, each of which would be managed separately. The main objectives of this option are to (a) eliminate inefficient supply subsidies, and (b) limit fiscal costs to the central government. This option would limit both actual and contingent liabilities to the central government, which arise mainly from the ISS increasing pension obligations. Similar to the first option, the ISS should be divided into four separate entities according to responsibilities, and auditable accounts would be produced to allow external auditors to express an opinion about these accounts.

The next step will require the closure of ISS–Health Insurance (EPS) and Health Provisioning (IPS), and the financing by the central government of all accrued severance and pension obligations (present value of pension benefits amounts to approximately US$1.7 billion, other obligations amount to about US$305 million in severance payments and US$150 million in debts with providers). As part of severance payments, the central government might also consider giving health assets to workers. A fiscal impact estimation for this reform option shows savings equivalent to 1.2 percent of the 2000 GDP (Appendix, Table A.2). In the case of no reform, it is assumed, as in Option 1, that a total of US$250 million per year would be transferred from the Treasury to the ISS to finance operating losses. It is important to mention that the net savings of this option are underestimated given that it does not take into account the value of assets that could be sold in the process.

### *b) Public Hospitals*

The restructuring plan for the public hospital network plays a key role not only for the public network itself, but also for the whole of the health sector and the viability of the reform. Reforming public hospitals would allow them to reduce their cost structure, adapt their network to the demand, and create a network of public and private facilities where the public facilities will effectively complement the private facilities. The fact that public hospitals would be financed through the selling of their services would free resources, which are now used as supply subsidies to cover hospital debts. In turn, these resources would be used to finance increasing coverage in the subsidized regime. Apart from the obvious advantages in terms of limiting fiscal costs for the government and ensuring health insurance for the poor, the restructuring of public hospitals would allow for best-quality services provided to the Colombian population. The Ministry of Health has started a program of restructuring 27 hospitals, which within the first year reduced costs by 5 percent. Although the central government appears committed to carrying out this restructuring plan, the level of cost reduction is crucial for its outcome, as demonstrated below.

#### i. Option 1: Timid Restructuring

If the restructuring program is extended to all public facilities (levels I, II, and III), it is estimated that an injection of US$500 million would be needed to finance it (this estimate is provided by the DNP as a result of the technical study it developed and shared with the World Bank team). However, if the restructuring effort is timid, as observed in the 27 hospitals, and the reduction of costs is still 5 percent, it is expected that the net savings of the reform will be negative in the first two years and the government will recuperate its investment in real terms in seven-and-a-half years (see Appendix, Table A.3). Furthermore, hospital costs will continue to be high and their net present value over 10 years brought to the present at a 4 percent interest rate will be US$30 billion, or 37 percent of the 2000 GDP.

#### ii. Option 2: Bold Restructuring

On the other hand, if the restructuring effort is bold and reduces costs by 10 percent a year, it is expected that the net savings from the reform will be negative during the first year—due to the initial investment of U$500 million in two years—but then the central government can recuperate its investment in four years (see Appendix, Table A.4). The net present value of hospital costs under this restructuring program will be lower and equal to US$27.5 billion, or 34 percent of the 2000 GDP. Following the second scenario, in 10 years the economy will accumulate a net savings of US$2 billion, equivalent to 3.3 percent of the GDP of 2000. These efforts should be reflected in a national policy or strategy for public hospitals, which has not existed until now.

Again, as in the case of the ISS, the political difficulties faced when reforming public hospitals are understood. However, the public hospital situation is not only a financial problem, but is one of immense financial consequences, as described above. Without a strong effort in favor of deep hospital reform, it is not possible for Colombia to consolidate the gains from health reform. Most probably, if deep hospital reform does not happen in Colombia in the next five years, the country will lose ground when compared with its neighbor countries, and will no longer be the country that rates first in financial fairness.

### *d) Financing*

#### i. Evasion in the Contributory Regime

Evasion in the contributory regime is an issue where no major steps have been taken at a national level. In an attempt to contribute to the discussion about this problem, two groups of actions are presented: (a) short-term actions that aim to reinforce and improve the current system of affiliation and collection of contributions, and (b) medium- and long-term actions that propose changes in the current system of affiliation and collection of contributions.

With respect to the first group the following actions are proposed:

- Developing a common information system. An information system characterized by simplicity and uniformity is essential for combating evasion and elusion. At present, administrators of different types of social security contributions and taxes such as the Health Superintendency, the Ministry of Finance, the FOSYGA, the *Dirección Nacional de Impuestos y Aduanas* (National Directorate of Taxes and Customs, DIAN), the *Administradoras de Riesgos Profesionales* (Administrators of Professional Risks, ARP), and the *Administradoras de Fondos de Pensiones* (Administrators of Pension Funds, AFP) have separate information systems, which do not allow them to share information and carry out efficient controls.
- Developing a unique database. The National Health Superintendency monitors health insurance coverage in the contributory regime through an Internet database (*Comprobación de Derechos*), which will be completed by July 2002. Following its completion, a crosscheck between this database and the databases of the FOSYGA, the DIAN, ARPs, and AFPs should be carried out, and a common database should be designed. Designing a common database will also require the development of a common identification system for employees, employers, and independent workers.
- Linking the *carnet* of affiliation given by EPSs to their members to other official documents. For example, individuals should be requested to show their

*carnet* of affiliation in order to obtain a passport or a visa to visit a foreign country, or to use banking services.

- Implementing a reputable system of vigilance and control with a high capacity to detect and punish evasion and elusion. Given that the Health Superintendency does not have the right to exercise legal actions against criminal offenders *(action penal)*, a close collaboration would be needed between the Health
- Superintendency, the *Procuradoría*, and the *Fiscalía*. The latter two institutions should have specific groups working on the health system.
- Learning from the experience of other entities that have successfully combated problems of elusion and evasion. In this aspect both the Bank Superintendency (*Superintendencia Bancaria*) and the DIAN can offer valuable feedback to the Health Superintendency.
- Carrying out information and communication campaigns that will stimulate affiliation and payment of contributions. The three main elements of such campaigns would be (a) motivation—why individuals should pay contributions, (b) information—where and how they can pay contributions, and (c) consequences—which are the personal implications if they do not pay contributions.

The following medium- and long-term actions have been discussed with respect to the health arena:

- Deducting health insurance contributions at the source of income (*autorentención en la fuente del aporte*)
- Creating a unified system of collecting contributions (*sistema único de recaudo*).

Both measures imply the modification of Article 205 of Law 100, which currently states that EPSs are the entities responsible for collecting contributions. In the case of the first action, health insurance contributions would be collected by the employer. The contributions would be channeled to FOSYGA, which in turn would remit to the EPSs the sum of the UPCs corresponding to their affiliates. Such a measure would additionally require the development of a new form of deduction at the source of income, a copy of which would be provided to the individual in order to verify to his or her EPS the payment of the contribution. Following this measure, the responsibility for collecting contributions would be taken away from the EPSs and the whole process would be simplified. Such an action could be implemented directly by the FOSYGA with the support of the DIAN, which would carry out the controls.

The second option suggests that contributions would be collected by a central entity other than the EPSs. Among the proposed entities has been the DIAN. This measure would imply that the DIAN would have to expand its tax controls to small and medium-size enterprises; currently it is concentrating on large contributors. However, there is criticism with respect to the fact that assigning the collection of health insurance contributions to the DIAN may weaken its ability to accomplish its present job. Furthermore, it adds one more entity in the chain, where payments would be transferred from the DIAN, to the FOSYGA and then to the EPSs.

### ii. FOSYGA Accounts

The inclusion of the FOSYGA Solidarity and ECAT Accounts in the national budget can be justified as a way of enabling the central government to keep control of aggregate spending by imposing expenditure ceilings. However, as a result, resources in FOSYGA exceeding the budgetary ceiling have been spent on the financing of activities different from those directed to increase health insurance coverage for the poor (see supply subsidies).

The ideal solution to this problem would be to remove the FOSYGA accounts from the national budget to enable resources to be used for what they are intended. This would require a change in Article 123 of Decree 111/96 of the *Estatuto Orgánico de Presupuesto*. However, the central government has been reluctant to do that for the reasons mentioned above. The central government recognizes the problem, and therefore as a second-best solution has agreed to use the resources of the FOSYGA Solidarity Account exclusively for increasing coverage in the subsidized regime. This commitment is soon to be materialized through a Ministry of Finance regulation. The main disadvantage of this arrangement is that such a decision could easily be reversed by future administrations.

### iii. Delays in Transfers from National Territories to ARSs and Ultimately to Health Care Providers

From April 1999 to September 2000, national territories owed COP57,000 million (US$23 million) to the ARSs. According to Decree 46/2000, these resources should automatically be deducted from transfers to national territories to pay the debt. Although Law 715 simplifies the system of allocation of resources among territorial entities, it does not address the issue of already existing debts. It is imperative that this debt be paid in order for territorial authorities to extend coverage and for ARSs to be able to pay their accumulated debt with both public and private providers (estimated to be COP37,000 million, or US$15 million). Payment of arrears will translate into better quality of services for affiliates of the subsidized regime. Beneficiaries of the system have presented an *Acción de Cumplimiento* requesting enforcement of Decree 46/2000 by the MOH and the Health Superintendency.

Furthermore, it is crucial to materialize the transformation of supply to demand subsidies as mandated by Law 715. This means that in 2003–04 the formula for the distribution of resources between the financing of the subsidized regime and public hospitals should be changed and adjusted to the new number of affiliates and *vinculados*. Given that during the first two years since the approval of the law the number of affiliates will increase, the number of *vinculados* will decrease. As a result, by 2003–04 it is expected that more resources should be devoted to the financing of the subsidized regime compared to public hospitals.

### iv. Definition of Health Benefit Package of the Contributory Regime

The issues of the content of the POS and the *tutelas* (lawsuits) are intrinsically linked. As far as the health benefit package is concerned, further exploration is needed of the fact that the POS offers comprehensive coverage without necessarily having the means to finance it through the UPC. For that reason, it is proposed that the DNP, in collaboration with the MOH, should launch a study to redefine the content of the health benefit package, and consequently adjust the risk-adjusted premium. The new content of the health benefit package and the level of the new risk-adjusted premium would then be legally defined by an accord of the *Consejo Nacional de Seguridad Social en Salud* (National Council of Social Security in Health, CNSSS).

With respect to the lawsuits, a first attempt to deal with the issue appears in the *Plan de Desarrollo, Cambio para Construir la Paz, 1998–2002*, which proposes the approval of a *Ley Estatutaria* for the health sector, aiming to define more precisely the rights of the citizens and the obligations of the State. Preliminary versions of such a proposed law exist, although its content is still not widely known.[15] The purpose of the *Ley Estatutaria* is to protect, through legislation, the further expansion of the content of the POS. The proposal recognizes the right to health as a fundamental right, given its connection with the right to life. However, at the same time, it points out that the Colombian Constitution mandates the maximization of the well-being of the total population; that is, the interest of a group exceeds that of the individual. Hence, in the presence of a lawsuit that demands health services of high cost for a particular person, justice needs to consider first the rights of the group of individuals who, because of limited resources, may not be able to receive other health services in the future (opportunity cost). Recognizing this conflict, the *Ley Estatutaria* aims to provide a legal framework to assist in making decisions within this "grey" area.

In addition, it is worth mentioning that the issue of reinsurance for high cost–low incidence events recently has been addressed through an accord of the CNSSS, in which a new mechanism is defined for redistributing fractions of the UPC for the contributory regime among EPSs as a function of the relative weight of high-cost services.

The lack of definition regarding the content of the POS poses serious problems for the viability of the health system, and a legal framework with respect to the issue is greatly needed. This legal void can be filled by the approval of a *ley estatutaria* for the health sector.

### v. Health Insurance Coverage and Targeting

To address the issue of the confusion between an SCD and affiliation, the communications plan for the subsidized regime supported by the central government should be designed and financed. Emphasis should be on the difference between the application of the survey of SISBEN and affiliation to an ARS. In addition, the campaign should concentrate on issues such as the free election of insurance entity and the content of the health care package of the subsidized regime.

---

[15] This project was developed by the *Consejeria Presidencial* during the Pastrana Administration.

88

As explained in the section on The Confusion between an SCD and Affiliation, the lack of incentives in the subsidized regime is due to the fact that affiliates and *vinculados* end up paying the same copayment. To resolve this issue the CNSS should issue an accord increasing the copayments for the group of those who possess an SCD but are still not affiliated to the system. Under the current legislation individuals of SISBEN level 1 who are affiliated pay a copayment of 5 percent of the price of the service. The same copayment is paid by individuals of SISBEN level 1 who have an SCD but are not affiliated. An increase of the copayment paid by individuals of SISBEN level 1 who have an SCD but are not affiliated to the system to, for example, 7 percent, could provide an incentive for these individuals to become affiliated. These types of incentives appear to have worked when the SISBEN system was first implemented and individuals were urged to acquire an SCD in order to pay part of the price of the health care service they received. In the case of individuals of SISBEN level 2 who are affiliated, the copayment is 10 percent of the price of the service. The same copayment is also paid by individuals of SISBEN level 2 who have an SCD document but are not affiliated. If the copayment for the SISBEN level 2 individuals who have an SCD and are not affiliated increases to, for example, 12 percent, these individuals will have a greater incentive to get affiliated and therefore to pay less.

The increase of the copayments of the *vinculados* does not imply a modification of Law 100, and in legal terms is fairly straightforward to implement. Nevertheless, it could create a situation where it could be claimed that the government, instead of helping the poorest, forces them to pay more. But in reality, if affiliated, individuals would pay lower copayments as defined for those in the subsidized regime. The possibility of negative publicity implies that such a movement should also be accompanied by a strong information campaign to help people understand the changes and the reasons for implementing them.

The SISBEN index variables and weights assigned were recently updated. The next step is the reapplication of the survey to classify households according to their SISBEN level, a process that is estimated will be completed by 2005. At the same time, emphasis should be on the other components recommended by the CONPES, including (a) monitoring and evaluating the quality of the information collected by consolidating databases, carrying out field-based spot reviews, and evaluating the efficiency and effectiveness of the instrument; (b) applying a system of sanctions and incentives aimed at minimizing the manipulation of SISBEN and rewarding its frequent updating; and (c) establishing clear norms and procedures between local and central levels for reporting and resolving problems that occur during implementation of the program. Nevertheless, one should take into account the difficulties of updating an index like SISBEN in a country were approximately 500,000 people are displaced annually because of violence.

### vi. Public Health: The Issue of Vaccination

The final report on the evaluation of the national vaccination program signed by representatives of PAHO, the MOH, and the INS summarized the problems and achievements of the program and presented a series of recommendations. The recommendations for the improvement of the PAI program encompass all aspects of the immunization program and were consolidated into a draft five-year Plan of Action. Crucial to the successful implementation of these recommendations will be the identification of needed funds.

Implementation of the national Plan of Action as intended by the MOH and the INS is expected to result in impressive gains in vaccination coverage, with levels reaching national goals of 95 percent. According to PAHO estimates, without implementation of the national Plan of Action, and assuming a best-case scenario where coverage levels are maintained at current levels (82 percent) or slightly improve, measles coverage levels will not reach even 90 percent by 2005. However, with implementation of the Plan of Action, coverage should reach 97 percent. Similar improvements in coverage levels for three doses of DTP are also expected. Implementation of the Action Plan would translate into the protection of an additional 100,000 1-year-old children each year against vaccine-preventive diseases.

## IV. Conclusion

During the 1990s Colombia took important steps with respect to its health care system. These steps have generated a number of positive effects on insurance coverage, access to health care, quality of services, and equity. Furthermore, the central government recently addressed a number of issues through reform programs and restructuring plans. Nevertheless, further actions need to be taken if the positive outcomes following the introduction of Law 100 are to be completed, consolidated, and sustained. Considerable and clear policy efforts in the next four years are necessary for Colombia to continue to deserve a rating as the country with the best health system in terms of financial justice among the world's 191 countries.

The Colombian health care system does not appear to suffer from lack of funds. The resources available are sufficient to achieve full coverage for the poor in the subsidized regime provided they are distributed appropriately. Such a redistribution can be achieved through the exclusive use of the funds of the FOSYGA Solidarity Account for the financing of the subsidized regime, and the transformation of supply to demand subsidies as defined by Law 715. The transformation of the full amount of available resources of the *Situado Fiscal* and the use of the accumulated FOSYGA reserves for increasing coverage would mean the expansion of the subsidized regime by 5 million individuals (or 52 percent of the population already affiliated to the subsidized regime). Also, a sustained combination of actions, such as reducing evasion while investing a portion of FOSYGA reserves, and even partially transforming the *Situado Fiscal,* would translate into the desired increase in affiliation of the poor to the subsidized regime.

A redistribution of resources in the system favoring demand subsidies would also provide strong incentives for hospitals and the ISS–Health to achieve greater efficiency and to be able to compete. The restructuring of public hospitals, which are currently financed by government subsidies and not by providing (selling) their services will, in 10 years, accumulate a net savings of US$2 billion (in 2000 dollars), equivalent to 3 percent of the 2000 GDP. This restructuring is necessary to consolidate the gains already made by the reformed health system in Colombia and to increase financial fairness in the system. Without it, not only will the reform stall, but the system as a whole will continue suffering the high cost of inefficiency in the public provision of services. By the same token, the reform of the ISS can, in 10 years, provide a fiscal savings of between 1.2 and 2.4 percent of the 2000 GDP, depending on the type of reform. Not advancing in this area has a high cost for both the Treasury and the Colombian society as a whole.

On the demand side, the provision of information to and education of the population are crucial for increasing insurance coverage and access to health care. The legislation on Colombia's health care system is complex, which makes the workings of the system even more difficult for the average citizen to understand. As a result, there is a lack of knowledge about issues such as the affiliation process, the content of the health care benefit package, and the free choice of insurer and health care provider. Implementing communication and information campaigns will be important to guarantee the reform's success as a means for individuals to understand both their rights and their obligations. Furthermore, the definition of rights and obligations for both affiliates and the State will be further assisted by the approval of a *Ley Estatutaria* for the health sector.

A key factor in completing the reform will be cracking down on evasion, which would have a positive effect for both the contributory and subsidized regimes. Developing strategies of vigilance and control with a high capacity to detect and punish evasion and elusion will provide additional resources in the system and support the solidarity principle mandated by the reform. Elimination of evasion would increase the resources entering the Compensation Account by COP1,881,000 million (US$767 million), equivalent to 56 percent of the Compensation Account in 2000, and would expand affiliation to the subsidized regime by 1.2 million individuals.

All these measures need the strong and unconditional support of the central government. In the future, the government, by focusing on ensuring that actions mandated or followed by the 1993 reform are properly implemented, and correcting for those that still need further tuning, can only harvest gains. The health reform process is ambitious and change has already been implanted in health sector actors and institutions. To radically change direction at this stage could have enormously costly consequences that might translate into reduced access and lower satisfaction among the poorest. The new system is designed to operate as a whole. Selective implementation of the reform will inevitably lead to problems, while full and committed execution of the reform's mandates would help Colombia continue to be in the forefront of the health arena not only among the developing world, but among the developed world, as well.

# Appendix

**Table A.1. Option 1: ISS Health, Millions of US$ (in year 2000 dollars)**

| | *2001* | *2002* | *2003* | *2004* | *2005* | *2006* | *2007* | *2008* | *2009* | *2010* |
|---|---|---|---|---|---|---|---|---|---|---|
| *(A) Critical Base Scenario* | | | | | | | | | | |
| Operating losses[1] | (250) | (250) | (250) | (250) | (250) | (250) | (250) | (250) | (250) | (250) |
| (B) With Reform | (1,214) | 48 | 138 | 165 | 174 | 179 | 183 | 188 | 192 | 196 |
| Net investment[2] | (455) | | | | | | | | | |
| Additional incentives to labor[3] | (600) | | | | | | | | | |
| Net operating loss or surplus[4] | (159) | 48 | 138 | 165 | 174 | 179 | 183 | 188 | 192 | 196 |
| ***(C) Net Savings from Reform***[5] | **(964)** | **298** | **388** | **415** | **424** | **429** | **433** | **438** | **442** | **446** |
| Net Present Value Option 2[6] | **1,997** | | | | | | | | | |
| **80,000** | | | | | | | | | | |
| **2.2%** | | | | | | | | | | |

1. Reflects the financing request from ISS to the Ministry of Finance.
2. For 2001: US$305 million of severance payments + US$150 million to pay for short-term liabilities with providers.
3. Additional incentives given to workers to accept convention renegotiation.
4. Projections by ISS of a model with the following major assumptions:
   Affiliates: Constant at 5.2 million.
   Service: At competitive market prices with no supply subsidies.
   Workers under private sector labor conditions.
   Pension obligations under Law 100 conditions.
5. = − (A) + (B).
6. Net Present Value at 4 percent real interest rate.

*Note:* Exchange rate constant at COP2,229.18 pesos per US$1.

Table A.2. Option 2: ISS Health, Millions of US$ (in year 2000 dollars, without including values of assets that could be sold)

| | *2001* | *2002* | *2003* | *2004* | *2005* | *2006* | *2007* | *2008* | *2009* | *2010* |
|---|---|---|---|---|---|---|---|---|---|---|
| *(A) Critical Base Scenario* | | | | | | | | | | |
| Operating losses[1] | (250) | (250) | (250) | (250) | (250) | (250) | (250) | (250) | (250) | (250) |
| *(B) With Reform* | (1,055) | | | | | | | | | |
| Net investmet[2] | (455) | | | | | | | | | |
| Additional incentives to labor[3] | (600) | | | | | | | | | |
| Net operating loss or surplus[4] | 0 | | | | | | | | | |
| ***(C) Net Savings from Reform***[5] | **(805)** | **250** | **250** | **250** | **250** | **250** | **250** | **250** | **250** | **250** |
| Net Present Value Option 1[6] | **1,013** | | | | | | | | | |
| GDP end 2000 | **80,000** | | | | | | | | | |
| NPV /GDP | **1.1%** | | | | | | | | | |

1. Reflects the financing request from ISS to the Ministry of Finance.
2. For 2001: US$305 million of severance payments + US$150 million to pay for short-term liabilities with providers.
3. Additional incentives given to workers to accept convention renegotiation.
4. ISS closes EPS and IPS.
5. = − (A) + (B).
6. Net Present Value at 4 percent real interest rate.

*Note:* Exchange rate constant at COP2,229.18 pesos per US$1.

Table A.3. Option 1: Timid Restructuring of Public Hospitals, Millions of US$ (in year 2000 dollars)

| | *2000* | *2001* | *2002* | *2003* | *2004* | *2005* | *2006* | *2007* | *2008* | *2009* | *2010* |
|---|---|---|---|---|---|---|---|---|---|---|---|
| *Critical Base Scenario* | | | | | | | | | | | |
| (A) Hospital operating costs[1] | 2,212 | 2,411 | 2,628 | 2,865 | 3,122 | 3,403 | 3,710 | 4,044 | 4,408 | 4,804 | 5,237 |
| *Timid Restructuring Scenario (5%)* | | | | | | | | | | | |
| (B) With Reform | | 2,541 | 2,747 | 2,721 | 2,966 | 3,233 | 3,524 | 3,841 | 4,187 | 4,564 | 4,975 |
| Net investment[2] | | 250 | 250 | | | | | | | | |
| Hospital operating costs[3] | | 2,291 | 2,497 | 2,721 | 2,966 | 3,233 | 3,524 | 3,841 | 4,187 | 4,564 | 4,975 |
| ***(C) Net Savings from Reform***[4] | | (129) | (119) | 143 | 156 | 170 | 185 | 202 | 220 | 240 | 262 |
| NPV of (A)[5] | **30,000** | | | | | | | | | | |
| NPV/GDP | **37%** | | | | | | | | | | |
| NPV of (B)[5] | **29,000** | | | | | | | | | | |
| NPV/GDP | **36%** | | | | | | | | | | |
| NPV of (C)[5] | **936** | | | | | | | | | | |
| NPV/GDP | **1%** | | | | | | | | | | |
| GDP end 2000 | **80,000** | | | | | | | | | | |

NPV = Net Present Value

1. The average increase of hospital operating costs is 8 percent.

2. Total cost of restructuring for all public hospitals is US$500 million dollars, divided between two years of restructuring.

3. This scenario assumes that total hospital costs will decrease by 5 percent every year.

4. = − (A) + (B).

5. NPV at 4 percent real interest rate.

*Note:* Exchange rate constant at COP2,229.18 pesos per US$1.

Table A.4. Option 2: Bold Restructuring of Public Hospitals, Millions of US$ (in year 2000 dollars)

| | *2000* | *2001* | *2002* | *2003* | *2004* | *2005* | *2006* | *2007* | *2008* | *2009* | *2010* |
|---|---|---|---|---|---|---|---|---|---|---|---|
| *Critical Base Scenario* | | | | | | | | | | | |
| (A) Hospital operating costs[1] | 2,212 | 2,411 | 2,628 | 2,865 | 3,122 | 3,403 | 3,710 | 4,044 | 4,408 | 4,804 | 5,237 |
| *Bold Restructuring Scenario (10%)* | | | | | | | | | | | |
| (B) With Reform | 2,212 | 2,420 | 2,615 | 2,578 | 2,810 | 3,063 | 3,339 | 3,639 | 3,967 | 4,324 | 4,713 |
| Net investment[2] | | 250 | 250 | | | | | | | | |
| Hospital operating costs[3] | | 2,170 | 2,365 | 2,578 | 2,810 | 3,063 | 3,339 | 3,639 | 3,967 | 4,324 | 4,713 |
| ***(C) Net Savings from Reform[4]*** | | (9) | 13 | 286 | 312 | 340 | 371 | 404 | 441 | 480 | 524 |
| NPV of (A)[5] | **30,000** | | | | | | | | | | |
| NPV/GDP | **37%** | | | | | | | | | | |
| NPV of (B)[5] | **27,500** | | | | | | | | | | |
| NPV/GDP | **34%** | | | | | | | | | | |
| NPV of (C)[5] | **2,325** | | | | | | | | | | |
| NPV/GDP | **3%** | | | | | | | | | | |
| GDP end 2000 | **80,000** | | | | | | | | | | |

NPV = Net Present Value

(1) The average increase of hospital operating costs is 8 percent.

(2) Total cost of restructuring for all public hospitals is US$500 million, divided between two years of restructuring.

(3) This scenario assumes that total hospital costs will decrease by 10 percent every year.

(4) = − (A) + (B).

(5) NPV at 4 percent real interest rate.

Note: Exchange rate constant at COP2,229.18 pesos per US$1.

## References

Bitrán y Asociados. 1998. "Targeting of Public Subsidies for Health in Colombia." Paper presented at the Flagship Course on Health Sector Reform and Sustainable Financing. Washington D.C.: World Bank.

DNP (Departmento Nacional de Planeación). 2001. *Desarrollo Humano, Colombia 2000*. Santafé de Bogotá: DNP, Misión Social, Programa de las Naciones Unidas Para el Desarrollo.

Fedesarrollo. 2000. "El Sistema de Seguridad Social en Salud: Logros y Retos." Editorial in *Coyuntura Social*, 23.

*Gaceta del Congreso*. 2001. Ponencia para Primer Debate al Proyecto de Ley 120 2001 Senado, 135 de 2001 Cámara. 23 de Noviembre.

Giedion U., H. R. López, and J. A. Marulanda. 2000. "Desarrollo Institucional del Sector Salud en Bogotá." *Coyuntuta Social*, 23.

Harvard University. 1996. *Report on Colombia Health Sector Reform and the Proposed Master Implementation Plan*. Cambridge, MA: School of Public Health.

Ministerio de Salud. 2000. "Programa de Apoyo a la Reforma. Santafé de Bogotá.

______. 2001. "Evaluación de la Reestructuración de los Procesos, Estrategias y Organismos Públicos y Privados Encargados de la Afiliación, Pago y Recaudo de Aportes al Sistema." Programa de Apoyo a la Reforma, Proyecto No. 03-99. Tercer Informe Cuatrimestral. Santafé de Bogotá.

Molina, C. G., U. Giedion, M. C. Rueda, and M. Alviar. 1993. "El Gasto Público en Salud y Distribución de Subsidios en Colombia." In Estudio de Incidencia del Gasto Público Social." Santafé de Bogotá: Fedesarrollo and Departamento Nacional de Planeación.

OECD. 1992. *The Reform of Health Care: A Comparative Analysis of Seven OECD Countries*. Health Policy Reports. Paris: OECD.

Panopoulou, P. 2002. *Health Insurance and the Utilization of Health Care Services. The Case of Colombia after the Reform of 1993*. Unpublished doctoral dissertation. University of Sussex, England.

Plata B., U. Giedion, L. G. Morales, and E. Bloom. 1999. *La Evasión de Aportes Obligatorios al Sistema de Salud en Colombia*. Santafé de Bogotá: Fundación Corona and Fedesarrollo.

Plaza B., A. B. Barona, and N. Paredes. 1999. *Afiliación de Población Pobre al Sistema de Salud: el Caso Colombiano*. Santafé de Bogotá: Fundación Corona.

Project of Ley Estatutaria. 1999.

Universidad de Antioquía. 2001. *Cobertura del Seguro de Salud en Colombia*. In *Observatorio de la Seguridad Social*. Centro de Investigaciones Económicas, Facultad de Ciencias Económicas, Antioquía.

Vélez Echevarria, C. E., and V. Foster. 2000. "Colombia Poverty Study. The Distributional Impact of Public Social Expenditure." Poverty Unit, Poverty Reduction and Economic Management Division, Latin American and the Caribbean Region. Washington D.C.: World Bank.

World Bank. 2001. *Colombia Poverty Report*, Volumes I and II. Colombia Country Management Unit, Poverty Reduction and Economic Management Division, Sector Management Unit, Latin American and the Caribbean Region. Washington, D.C.

______. 2001. *World Development Indicators*. Washington, D.C.

World Health Organization. 2000. *The World Health Report*. Geneva.

Zukin, P. 1985. "Managed Prepaid Health Care in Latin America and the Caribbean: A Critical Assessment." Washington, D.C.: The Group Health Association of America, Inc.

# 23

# The Social Safety Net

*This Chapter was written by Laura B. Rawlings.*

## I. The Social Safety Net in Colombia

Colombia has historically relied on economic growth and the parallel expansion of basic social services as a substitute for implementing a social safety net (Perotti 2000).[1] Social assistance was not included in the dramatic social sector reforms of the 1990s that resulted in increased spending and decentralization for health and education. As a consequence, social assistance programs remain not only ill-suited to respond to large covarite shocks (shocks that affect many people simultaneously), but also underfunded, centralized, and lacking a strategic focus. The social sector policy reforms introduced in the 1990s by the 1991 Constitution, Law 60, and Law 100 did not include social assistance. The exclusion of social assistance from these reforms had three consequences.

First, social assistance was left out of the large increase in social sector spending fueled by Colombia's solid economic growth. Whereas funding for health and education rose from approximately 4 percent of GDP in the early 1990s to over 8 percent of GDP by 1996, central government budgeted expenditures on social assistance fluctuated around 1 percent of GDP during the first part of the 1990s, and fell to less than 0.7 percent by 2000.[2] This is a very low level of social assistance spending compared to countries at a similar stage of development,[3] and compared to the needs of specific vulnerable groups that lack access to key social assistance programs.

---

[1] This chapter is based on "The Social Safety Net in Colombia: Issues and Options in the Face of Economic Shock," Report #22255-CO, World Bank, 2002.

[2] Social assistance is defined as spending on the four main social assistance programs reported in aggregated budgetary data—the Colombian Institute for Family Welfare (ICBF), the Social Solidarity Network (RSS), the National Institute of Social Interest, Housing, and Urban Reform (INURBE), and utilities subsidies. This figure does not include spending on the new temporary *Red de Apoyo Social* (RAS) conditional cash transfer, workfare, and youth training programs.

Second, since the decentralization reforms that guided social sector policy did not include social assistance, the main social assistance programs remain highly centralized. The fiscal transfers to local governments that absorb 14 percent of GDP include no funding for social assistance. Local governments have almost no discretion over how social assistance and National Training Service (*Servicio Nacional de Aprendizaje,* SENA) funds are allocated.

Finally, the strategic focus and policy directives established for most social sector programs as part of the reforms were not applied to social assistance. Social assistance programs remain fragmented, unfocused, and largely outside of the reach of those in the informal sector.

When Colombia experienced its biggest recession in 70 years in 1999, the deficiencies in the social safety net were clearly revealed. The crisis introduced new vulnerabilities and exacerbated structural problems, with the combined impact still apparent in the high rates of unemployment, the protracted increase in poverty, the erosion of the social fabric, and the rise in vulnerability. Urban areas were hit particularly hard by the crisis. Urban poverty reached 55 percent by 1999 (11 percentage points higher than in 1995), reversing a decade of progress. The historical rate of unemployment doubled during the late 1990s, reaching 17 percent in 2000, with the highest rates concentrated in urban areas (24 percent), among youth (37 percent for those age 15 to 19), women (23 percent), and the middle class (25 percent for those with secondary education). The crisis also led to a large increase in the informal sector, which, combined with the high unemployment rates, underscores the rigidities in the Colombian labor market. The economic crisis was accompanied by an intensification of Colombia's internal conflict, the displacement of hundreds of thousands of people, and a general increase in violence and insecurity.

As outlined below, the social assistance programs that could have been mobilized to provide a safety net during the crisis were hampered by structural constraints, including a historic lack of financing (particularly during times of crises), institutional inflexibility, unfocused mandates, and poor targeting. As a response to the crisis, a new set of safety net programs was introduced as the Social Support Network (*Red de Apoyo Social,* RAS) to provide short-term emergency assistance until 2004, but without engaging in a broader strategic reform of the safety net. The next administration will need to evaluate the new RAS programs' performance and decide on its future role. This should be done as part of an overall safety net reform resulting in the establishment of an agile, efficient, and effective social risk management system.

---

[3] Each of the nine Latin America and Caribbean region countries included in a recent social protection expenditure review devotes a higher share of GDP to social assistance, including Argentina (0.9 percent), Mexico (1.1 percent), Peru (1.4 percent), Uruguay (3.4 percent) and Venezuela (1 percent) (Dulitsky, Gragnaloti, and Lindert 2001).

## II. Role of Social Safety Nets and Recent Policy Initiatives

A comprehensive social safety net serves two functions, one structural and one countercyclical. The first function addresses structural, chronic poverty or vulnerability and aims to protect a person or household against the adverse outcomes of a lasting incapacity to work or subsist (the "net" function). The second addresses transient poverty or vulnerability and aims to protect people against a temporary decline in their capacity to work or subsist (the countercyclical "trampoline" function; that is, the ability of people to bounce back to their preshock state). This latter category is the primary focus of this Chapter, particularly with respect to the role of safety nets during periods of economic crisis. A good countercyclical safety net addresses not only the immediate consequences of an economic crisis (for example, a fall in consumption), but also contributes to breaking the cycle of poverty and structural vulnerability through investments in human capital during crisis and noncrisis periods (World Bank 2001a; De Ferranti and others 2000).

The state has a particular role to play in helping the poor address risks through social insurance and social assistance programs. The definition of a social safety net is evolving, but generally it is thought of as including social assistance programs and often at least elements of social insurance programs (World Bank 2001b). Social assistance programs are those of a redistributive nature that transfer resources to particular at-risk groups, while social insurance mechanisms—such as public pensions and health insurance—pool risks across population groups. Social assistance may take the form of (a) cash or income transfers, such as child allowances; (b) transfers in kind, such as food subsidies, housing subsidies, energy subsidies, and feeding programs; or (c) income support to the vulnerable by providing jobs in an emergency situation, through a public works program.[4]

### *a) Colombia's Social Assistance Programs*

Beyond the national programs and nationally mandated policies summarized in Table 1, an important element of the social safety net is provided not by the national government but by local governments, nongovernmental organizations (NGOs), the private sector, and individuals themselves through informal arrangements. In addition, the subsidized health regime and pension solidarity fund are redistributive social insurance programs that play a key role in the social safety net.[5]

Social assistance programs and the SENA program in Colombia are primarily financed by payroll taxes and—with the notable exception of Colombian Institute for Family Welfare (*Instituto Colombiano de Bienestar Familiar*, ICBF) programs—remain available primarily to formal sector employees (Table 1). The tax burden increased

---

[4] For additional information on safety nets, please consult the World Bank website on safety nets at http://www.worldbank.org/poverty/safety/index.htm.

[5] See Chapters on Pension and Health Insurance Programs for further discussions.

**Table 1. Colombia's Main Social Assistance Programs**

| *Program* | *Type of Assistance* |
|---|---|
| *Instituto Colombiano de Bienestar Familiar* (Colombian Institute for Family Welfare, ICBF). | Directly administers three main in-kind transfer programs: formal daycare/early childhood development (ECD), informal home-based daycare/ECD, school feeding.<br>Also responsible for regulating child welfare. |
| *Red de Solidaridad Social* (Social Solidarity Network, RSS). | A social fund that finances a wide range of programs, including income support employment program, in-kind transfers for housing, and cash transfers to the elderly. |
| *Instituto Nacional de Vivienda de Interés Social y Reforma Urbana* (National Institute of Social Interest Housing and Urban Reform, INURBE). | Provides in-kind transfers in the form of subsidies for the construction and purchase of housing. |
| *Subsidio Familiar and Cajas de Compensación* (Family Subsidy, SF and Compensation Associations, CC). | *Cajas de Compensación* administers the family subsidy income support scheme and a variety of in-kind transfers. |
| *Programa para la Ampliación de la Educación Secundaria* (Private School Vouchers, PACES). | In-kind transfer program that provides vouchers for students to attend private secondary schools. |
| *Subsidios de Servicios Básicos* (Basic Service Subsidies—Water, Sewerage, Electricity, and Gas) | An in-kind transfer system of subsidies that makes the consumption of these basic services more affordable to residents of poor neighborhoods. |

*Source:* World Bank 2002.

substantially from 1990 to 1996 (total labor costs as a percentage of wages rose from 53 to 66 percent) and remains high, decreasing the competitiveness of Colombian firms and contributing to the protection of formal sector workers who are entitled to high severance payments, vacations, a 13th month salary, and other benefits. Several analysts have pointed to the pernicious effects of these and other labor regulations on labor market outcomes (Heckman and Pages 2000; Kugler and Kugler 2001; Lopez 2001). When considering the reform of the social safety net in Colombia, this high tax burden should be kept in mind, particularly since the poor bear a disproportional burden of unemployment and informality (see Annex Table A). A case could be made to

| *Risks Addressed* | *Administration* | *Financing* |
|---|---|---|
| Chronic malnutrition.<br>ECD coverage.<br>Preschool attendance. | Central government agency. | 3 percent payroll tax on all formal sector employees. |
| Elder poverty.<br>Internal displacement. | Central government agency. | General public revenues. |
| Housing for the poor. | Central government agency. | General public revenues. |
| Low income of formal sector workers. | Self-financed autonomous organizations. | 4 percent payroll tax paid by the employers based on the salaries of workers earning over four times the minimum wage. |
| Secondary school drop-out.<br>Public sector supply constraints. | Ministry of Education program administered through a subcontract by ICETEX (The National Scholarship Institute). | General public revenues. |
| Low income. | Not a formal program, but a legal mandate implemented by municipalities and departments responsible for basic service provision. | Cross-subsidization from richer to poorer neighborhoods through the application of progressive tariffs. |

engage in labor market reform by lowering the tax burden through the elimination of taxes on social programs that are not targeted to the poor, and securing alternative sources of revenue to finance a progressive, strengthened social safety net.[6]

---

[6] This reform would need to be carried out carefully and perhaps include guidelines for protecting social sector expenditures in crisis periods (as is done in Peru) because social expenditure data from the recent recession indicates that budgets for earmarked social programs were reduced less severely than those for programs financed through general revenues (World Bank 2002).

### *b) Responding to the Recent Economic Crisis: The Social Support Network*

Colombia's main social assistance programs were ill equipped to offer adequate countercyclical protection to those most affected by the recent crisis. These deficiencies led to the introduction of a new short-term program, the Social Support Network (*Red de Apoyo Social*, RAS), to mitigate the worst effects of the crisis. Implementation of the RAS programs began in 2001, and the programs were expected to have reached full capacity by early 2002.

The RAS safety net is composed of three principal programs promoting human development, employment, and job training. The *Empleo en Acción* community works program (formerly known as *Manos a la Obra*) aims to provide temporary employment to poor, unemployed, low-skilled workers by employing them in labor-intensive social and economic investment projects such as school expansion and road repair. A conditional cash subsidy program for poor families, *Familias en Acción*, aims to protect investments in children's health, education, and nutrition by providing cash to families conditional on keeping children in school and providing them with basic preventive health care. *Jovenes en Acción* is a training–apprenticeship program for young adults based on competitive bidding among private firms and public entities. Colombia has committed itself to administering these programs for four years (2001–04) and to reviewing the results of the impact evaluations at the projects' conclusion to assess the desirability of their continuation as part of a broader safety net strategy.

These programs provided an important step forward in establishing a countercyclical strategy that is appropriately targeted to key vulnerable groups affected by the crisis—notably the unemployed and the young—with income support and cash transfers appropriate to their needs. However, it took almost two years to develop the programs, secure financing, and implement a response, and the countercyclical approach has yet to be institutionalized. The next step is to evaluate the new RAS programs and integrate them into a coherent, reformed social safety net that includes a countercyclical component designed to address future crises with required agility and effectiveness.[7] If the RAS programs are not assessed as part of a broader social safety net reform, they risk becoming another institutional layer within the diffuse collection of social assistance programs.

## III. Main Sectoral Issues

A recent review of Colombia's social safety net was conducted by the World Bank and the government of Colombia in collaboration with key consultants based on an analysis of vulnerability and household use of social risk management, coupled with an assessment of the efficiency and effectiveness of Colombia's national public safety net programs. This review was prompted by the need to address the social consequences of the economic crisis of the late 1990s and examine the broader role of the social safety net in Colombia, and includes the following findings:

---

[7] See the full report on, "The Social Safety Net in Colombia: Issues and Options in the Face of Economic Shock," World Bank, 2002 for a discussion of how RAS programs might be treated as part of a larger safety net reform.

### *a) Issue 1: Sources of Vulnerability*

Vulnerability is based on the expected outcomes of risks and responses to those risks, with the degree of vulnerability determined by the probability that a shock will result in individuals, households, or communities falling below a predefined welfare threshold, such as poverty (Heitzman, Canagarajah, and Siegel 2002). In Colombia, an assessment of vulnerability using household survey data from the 1999 *Encuesta Social* and a series of *Encuesta de Hogares* was combined with a qualitative study on "Social Dimensions of the Crisis" (González 2001), and provided insights into the multidimensional aspects of vulnerability, the identification of at-risk groups, and the key role of the labor market in determining household poverty status.

#### i. Multidimensional Sources of Vulnerability

In a recent qualitative study conducted to examine vulnerability and social risk management, focus groups uniformly assessed the recent crisis as multidimensional, involving political, economic, and social factors, and affecting a broad cross section of Colombian society (see Table 2). Highlighted are the lack of a social safety net or exclusion from its benefits, especially affecting children and adolescents, and the migration typically from rural to urban areas increasing competition for fewer jobs and overburdening social services in receptor municipalities. The general perception of economic insecurity is further intensified because the crisis is perceived as having an earlier origin than the 1999 recession, and longer-term consequences.

Independent of their poverty status, all the focus groups agree that there is a strong correlation between the economic and political dimensions of the crisis, particularly regarding the effects of violence and the absence of the state in key areas of public life. A common perception among those interviewed has to do with not only a lack of good governance, but with a perceived lack of state presence. The absence of the state is seen as particularly acute with respect to its failure to protect citizens against violence and the armed conflict.

Results of both the quantitative and qualitative work also highlight the role of accumulated vulnerabilities, underscoring the tendency for shocks to manifest themselves disproportionately among the poor (Gaviria 2000) and those with pre-existing vulnerabilities (González 2001).

#### ii. At-Risk Groups: A Focus on Children, Youth, and the Internally Displaced Population

Children and adolescents are the main age-specific vulnerable groups in Colombia today requiring attention from a reformed safety net. Annex Table A presents an

**Table 2. Perceptions of Vulnerabilities by Socioeconomic Level**

<table>
<tr><th><em>Extremely Poor</em></th><th><em>Poor</em></th><th><em>Middle class</em></th><th><em>Upper class</em></th></tr>
<tr><td colspan="4"><strong>All informants (urban and rural)</strong><br>Less financing available from formal public social insurance programs (pensions, health).</td></tr>
<tr><td colspan="2"><strong>Informal workers (urban and rural):</strong><br>Decrease in labor demand.<br>Wage decrease.<br>Reduction in or total loss of access to public services.<br>Increase in social insecurity.</td><td rowspan="2"><strong>Functionaries (urban and rural):</strong><br>Dismissals at private companies and public institutions.<br><strong>Workers (urban and rural):</strong><br>Unemployment.<br>Reduction or loss of public social services.<br>Reduction in human capital accumulation as a result of the loss of or more limited access to social services and benefits.<br>Increase in social insecurity, including that of children, youth, and the elderly.</td><td rowspan="2"><strong>Landowners (rural):</strong><br>Reduced international competitiveness (commercial opening).<br>Reductions in international prices for key exports.<br>High transaction costs.<br>Insecurity as a result of <em>boleteo</em> (Colombian expression to indicate bribery, blackmail, and economic threats or death threats), and as a result of the guerrillas, narcotrafficking, and the armed conflict.<br><strong>Business owners (urban):</strong><br>Market fluctuations.<br>Price drops at international level.<br>Low competitiveness.<br>Increase in the price of imported production input materials.<br>Increase in transaction costs.<br>Insecurity caused by robberies and <em>boleteo.</em></td></tr>
<tr><td><strong>Marginalized and unemployed people (urban):</strong><br>Exclusion from social benefits.<br>Participation by other groups in the informal labor market, legally or illegally. Immigration by groups from the rural areas increases labor supply and, thus, competition. This increased labor supply has the tendency to drive down salaries.</td><td><strong>Day laborers (rural):</strong><br>Unemployment.<br>Reduction of agricultural prices.<br>Problems with ensuring food provision.<br>Ecological and environmental problems.<br>High transaction costs.<br>Inflation.<br><strong>Informal workers (urban):</strong><br>Rural to urban migration increases labor supply, reduces salaries, and reduces labor demand.<br>Regulation and prohibition of informal work like street vending (for example, the plans related to public or recreational spaces in the cities).</td></tr>
</table>

*Source:* González 2001.

overview of key risks groups by age, and social protection programs designed to address those risks.[8] Preschool- and primary-school-age children are facing important poverty, health, and nutrition risks, including a sharp decline in vaccination rates and an increase in the percentage of some diseases left untreated (like diarrhea). Roughly half of all children in Colombia have not been vaccinated against basic communicable diseases, a decrease in coverage of 10 percentage points in only 5 years (Profamilia 1995, 2000). Poverty is more prevalent among the very young than among any other groups analyzed in the 2001 "Colombia Poverty Report": close to 70 percent of children under age 7 in urban areas, and almost 90 percent of children in rural areas, are poor (see Table 3).

Youth aged 12 to 17 have been identified as exceptionally vulnerable due to their exposure to multiple aspects of violence and crime. Colombia already has the dubious distinction of having the highest kidnapping and homicide rates in the world, and a large share of both the perpetrators and victims of urban economic and social crimes are minors. Focus groups reported that juvenile delinquency and street robbery have increased dramatically in the last few years, and that teenagers are being recruited by force to participate in the armed conflict. Teenage pregnancy and exposure to sexually transmitted diseases also represent a major risk. According to Demographic and Health Surveys (Profamilia 1995, 2000), teenage pregnancy is on the rise. About 19 percent of female teenagers aged 15 to 19 were pregnant or had had a child by the time of the survey, compared to 17 percent in 1995. The rate is much higher in rural areas (26 percent) and is inversely related to education. These phenomena are undoubtedly exacerbated by the high and growing rates of inactivity and unemployment among youth (see Annex Table A).

Internally displaced people, a result of Colombia's internal conflict, constitute another critically vulnerable group. The drug-related economic and military strength of the guerrillas and paramilitaries has led to a dramatic increase in violence, deaths, and displacement, especially among the rural civilian population. There is considerable debate regarding the size and characteristics of the internally displaced population (IDP). The government of Colombia estimates that there are currently 400,000 displaced people, while other estimates put the number at close to 2 million (CODHES–UNICEF 1999). This population has been evicted from areas where they have been engaged in productive economic activities, and relocated in urban slums where employment prospects are limited, access to social services constrained, and violence and crime rampant.[9]

In contrast to earlier years, recent migration to urban areas is now a good predictor of poverty—64 percent are poor versus 55 percent of the general population

---

[8] A life-cycle approach to assessing risks and vulnerabilities was first introduced in Argentina (Arriagada, Castañeda, and Hall 2000) and provides a straightforward technique for identifying key risks and gaps in the coverage of existing programs, which can be useful in prioritizing attention to specific populations.

[9] Please see the Chapter on Internally Displaced Population for additional information.

**Table 3. Poverty Count for Different Subgroups of the Population, 1978–99**

| | *1978 (Percent)* | *1988 (Percent)* | *1995 (Percent)* | *1999 (Percent)* |
|---|---|---|---|---|
| ***URBAN Colombia*** | 70 | 55 | 48 | 55 |
| Children under 2 years | 80 | 71 | 63 | 72 |
| From 2 to 6 years | 81 | 70 | 63 | 69 |
| From 7 to 13 years | 80 | 70 | 62 | 69 |
| From 14 to 17 years | 73 | 61 | 55 | 64 |
| Over 65 years old | 52 | 42 | 35 | 37 |
| Migrants/just moved[1] | NA | 50 | 50 | 64 |
| Migrants < 5%[2] | NA | 51 | 46 | 60 |
| Migrants < 10%[3] | NA | 49 | 43 | 54 |
| Migrants < 25%[4] | NA | 50 | 42 | 44 |
| Women | 69 | 55 | 48 | 55 |
| Non-home owners | 77 | 64 | 57 | 63 |
| Home owners | 62 | 46 | 40 | 47 |
| Disabled | 69 | 68 | 60 | 60 |
| Pensioners | 37 | 32 | 20 | 24 |
| ***RURAL Colombia*** | 94 | 80 | 79 | 79 |
| Children under 2 years | 97 | 86 | 88 | 86 |
| From 2 to 6 years | 98 | 88 | 87 | 87 |
| From 7 to 13 years | 97 | 88 | 87 | 87 |
| From 14 to 17 years | 93 | 81 | 81 | 80 |
| Migrants/just moved[1] | NA | 79 | 74 | 79 |
| Migrants < 5%[2] | 69 | 80 | 72 | 76 |
| Migrants < 10%[3] | 76 | 74 | 73 | 75 |
| Migrants < 25%[4] | 59 | 78 | 69 | 73 |
| Women | 94 | 80 | 80 | 80 |
| Non-home owners | 93 | 81 | 82 | 79 |
| Home owners | 94 | 79 | 77 | 79 |
| Disabled | 93 | NA | 84 | 78 |
| Pensioners | NA | NA | 33 | 29 |

1. Refers to people who lived less than 1 percent of their lives in the current city.
2. Refers to people who lived less than 5 percent of their lives in the current city.
3. Refers to people who lived less than 10 percent of their lives in the current city.
4. Refers to people who lived less than 25 percent of their lives in the current city.

NA = Not available.

*Source:* Velez and others (2001).

(Table 3). Available data suggest that the majority of the displaced are women (56 percent) and children (55 percent are under age 18), with limited skills and education. In their migration from rural to urban areas, they have abandoned their main asset—their land—and face barriers to accessing jobs and social services. Their concentration in a few cities in Colombia has placed an added strain on limited municipal budgets, a situation compounded by the ongoing severe lack of financing for Colombia's main national strategy for the internally displaced people.

### iii. Labor Market Dynamics

Looking beyond the vulnerabilities of specific groups to focus on households underscores the critical role of the labor market in determining changes in poverty status. Those households experiencing the largest increase in poverty during the recent recession were those with only self-employed workers or only nonlabor income, whereas households composed entirely of wage earners saw the smallest increase in poverty. Of particular note, unemployment of the household head is catastrophic for poverty risks; in urban areas poverty is 25 percentage points higher if the head used to work and is presently unemployed (Velez and others 2001). Paralleling the findings from the survey data, focus group participants in both rural and urban areas ranked economic insecurity as their principal source of risk, followed closely by violence (González 2001).

In sum, these results point to the pernicious effects of labor market rigidities in Colombia and the high vulnerability of children and youth, who constitute a disproportionate share of the population of internally displaced people. Labor market reforms facilitating greater access to employment, particularly in the formal sector, are critical to addressing vulnerability in Colombia. Improvements in the coverage and quality of safety net programs are also required for children, youth, and the internally displaced population.

The internal conflict requires creativity in addressing the needs of populations in conflict areas as well. Since the government of Colombia has a limited presence in the areas where the guerrillas and paramilitaries are strongest, the resident civilian populations are basically cut off from any substantial government social assistance. Addressing the needs of the populations in these areas calls for creativity, perhaps through building on successful partnerships with NGOs, to find approaches allowing the state to function effectively in the provision of social services.

## *b) Issue 2: Social Risk Management*

The concept of managing social risk comes from the notion that certain groups in society are vulnerable to unexpected shocks that periodically threaten their livelihood or survival. Others live in a chronic state of impoverishment that places their livelihood in a constant state of risk. Effective risk management consists of choosing the appropriate risk prevention, mitigation, and coping strategies to minimize the adverse impact of social risks. In general it is less costly to society to prevent risk than to cope with it afterward. First-best solutions enable individuals and households to self-protect, rather than turn to the government for assistance (World Bank 2001a). Incorporating an insurance approach based on risk pooling can also facilitate effective social risk management (Ehrlich and Becker 1972; De Ferranti and others 2000).

In Colombia, households used three clearly identifiable strategies to manage income risks presented by the recent economic crisis: mobilizing available labor (including child labor), reducing and diversifying consumption, and using available physical assets, particularly housing.

The use of household labor is a common strategy for achieving income diversification. The *Encuesta Social* reveals that households that have experienced an income shock are more likely to incorporate other members of the family into the labor force or increase the number of hours worked by the household head than those that have not experienced a shock (Table 4). The "Colombia Poverty Assessment" (Velez and others 2001) shows that a higher employment rate within the household (beyond just the household head) remains the most effective insurance against poverty, with poverty risks decreasing by 13 percent for each additional household member employed. The illegal use of available labor to augment household income was also widely reported in the qualitative work, including collaboration with armed groups, selling drugs, and prostitution. These opportunities are frequently pursued in the absence of legal, formal sector options, which are often conditioned by geographic location (González 2001).

Colombians resorted to pulling children out of school as a strategy for increasing income and decreasing consumption in the face of an economic shock. In 1999, when the recession was at its peak, the probability of a member of a household dropping out of school was 8 percentage points higher in those households that reported a negative income shock than in those that did not, controlling for economic status (Gaviria 2000).[10] In addition, wealthier and poorer families alike shifted children from private to public schools as a strategy for reducing consumption in the face of the recent crisis. Between 1996 and 2000, private secondary school enrollment as a

**Table 4. Social Risk Management Strategies**

| | *Increasing Labor Market Participation (Percent)* | *Increasing Work Hours (Percent)* | *Selling Assets (Percent)* |
|---|---|---|---|
| Income Shock | 21 | 24 | 25 |
| No Income Shock | 7 | 10 | 10 |
| Difference | 14 | 14 | 15 |

*Source:* Gaviria (2000).

---

[10] The *World Development Report* (World Bank 2001b) points to links between macroeconomic downturns and a deterioration in education indicators. For instance, in the Philippines, secondary school enrollments increased only 0.9 percent between the 1997–98 and 1998–99 academic years, after growing at an average annual rate of 2.6 percent in the previous five years before the Asian crisis. In Mexico, the proportion of each graduating class that enrolled in the next education level declined during the 1980s debt crisis, particularly among high school and university students. In Argentina and Mexico growth in gross primary enrollment slowed after the 1995 crises in these two countries. Finally, a study in South India found that children are often taken out of school in response to adverse shocks.

percentage of total enrollment fell by close to 20 percent in all except the richest quintile (World Bank 2002). These coping strategies can have lasting negative effects on human capital accumulation.

Consumption smoothing was also widely reported as a risk-coping strategy in both the qualitative study and the *Encuesta Social* survey. Poorer households reported reducing the number of meals and ingredients, while middle-income households reported substituting less expensive ingredients for more expensive ones in the household diet. Households also reported increasing the illegal use of basic services such as water and electricity as savings mechanisms.

Housing ownership in Colombia is a self-insurance device used widely by the poor in addressing the uncertainty of labor income and unemployment in the recent crisis. In focus groups, individuals reported using their homes to set up small businesses, provide shelter to extended family members, and to rent out floors and rooms to supplement income. The "Colombia Poverty Report" (Velez and others 2001) reveals that in urban areas people who do not own their own homes are more vulnerable to poverty (63 percent are poor compared to 47 percent of home owners, see Table 3).

Wealthier households are in a better position to manage risk because of greater access to savings and credit that translates into a lower loss of well-being in the face of an income shock. An analysis of the *Encuesta Social* reveals that whereas 40 percent of the families in the poorest quintile experienced income shocks that they were unable to manage through savings or credit, less than 10 percent of families in the wealthiest quintile were in this situation. In addition, although the probability of an income loss is the same for households in quintiles three and four, the capacity of households in the fourth quintile to manage that income loss is greater because of their greater access to assets (Gaviria 2000).

In sum, these results point to the key role of mobilizing available labor, including child labor, as a risk-coping strategy, and the role of housing, credit, and savings as risk-mitigation tools during the recent crisis. These dynamics point to the important role of access to assets and childcare. There seems to be additional scope for insurance mechanisms using risk-pooling mechanisms targeted to the poor—indeed coverage rates for subsidized health insurance and the pension solidarity fund remain low, and several analysts have suggested a need for unemployment insurance (Ayala and others 2000, 2001). These results also support the view that the RAS program design is properly calibrated to observed risks and patterns of social risk management, given the RAS program's emphasis on providing income support to the unemployed and protecting education and consumption among the extreme poor during an economic downturn.

### *c) Issue 3: Problems with Colombia's Social Safety Net*

As described above, Colombia has historically relied on economic growth to provide a safety net, and has yet to implement a comprehensive safety net policy. One of the main challenges facing the new administration that will take office in 2002 will be to overhaul the social safety net to make it an agile agent of social risk management in crisis and noncrisis periods. In carrying out this reform, the following characteristics of the present system should be considered:

### i. Procyclical Financing and Underfinancing

As outlined above, at 0.7 percent of GDP, Colombia's financing for social assistance programs remains critically low, even during normal times. Compounding this problem, spending on social assistance has historically been procyclical. A retrospective public social expenditure review reveals that for each peso of reduced GDP, social assistance spending fell by nine pesos, making social assistance the most procyclical component of social sector spending (CRECE 2001).[11] This pattern is evident in the recession of the late 1990s, which resulted in reduced spending on social assistance programs, with programs earmarked from payroll taxes such as ICBF suffering less dramatic budget cuts than those financed through general revenues, including the Social Solidarity Network programs for the indigent elderly and internally displaced people, whose programmed budgets were halved during the recession.

The introduction of the RAS programs financed by international borrowing equivalent to 0.3 percent of GDP through 2004 is an important first step in establishing a countercyclical safety net in Colombia. However, it took nearly two years for the RAS programs to be designed and launched, the programs remain temporary in nature, and a sustainable source of financing should be secured if they are maintained past 2004.

### ii. Institutional Archipelago—Lack of Strategic Focus

Colombia's safety net is an institutional archipelago—one composed of many institutions but not connected to each other and characterized by a lack of strategic focus, the fragmentation of programs within institutions, and overlapping program objectives across institutions. This is a legacy of the use of these institutions by successive governments to achieve a wide variety of policy goals, many of which remain unrelated to safety net objectives. Two agencies in particular, the Colombian Institute for Family Welfare (*Instituto Colombiano de Bienestar Familiar*, ICBF) and the Social Solidarity Network (*Red de Solidaridad Social*, RSS), seem to suffer from fragmentation of programs. Notably, the RSS has too many programs, many of which overlap with those implemented by other agencies, combined with too few resources to be able to fill in key gaps in the safety net for the elderly and the displaced. A comprehensive review of existing programs is needed as part of a new social-risk-management system for Colombia.

---

[11] This study defined social assistance as RAS programs, ICBF family welfare programs, and other programs for the elderly, children, and handicapped.

### iii. Poor Poverty Targeting

Existing social programs are primarily designed for formal sector workers (SENA and *Cajas de Compensación*) and not for the poorest, who lack formal affiliation in the labor market. Redistributive social assistance programs are limited in the face of a wide array of social programs, many of which are financed by the formal sector and for the formal sector through earmarked "benefit taxes" (see Table 1). The programs that require formal sector affiliation are taking up some of the resources that could be targeted to the poor. Furthermore, the use of available targeting mechanisms such as System of Beneficiary Selection (*Sistema de Selección de Beneficiarios*, SISBEN), Colombia's proxy means test, has not been adopted by the main social assistance programs as a way to reach the chronic poor.

### iv. Limited Information—Lack of Good Monitoring, Evaluation, and Budget Data

There is very little information available on the coverage, efficiency, and effectiveness of Colombia's social assistance programs. Basic monitoring data on the numbers of program beneficiaries and budgets are often either lacking or unreliable, complicating simple estimates of unit costs and reviews of program efficiency. Impact evaluation results are almost nonexistent.

The management of social public expenditures is complicated by partial and inconsistent social sector budgetary data. There is no accepted definition for social spending or social assistance in the national income accounts or in the budget. Budgetary data are partial, and different data sources show markedly different levels of spending on specific social assistance programs. Finally, most aggregated data are available only on an institutional basis without programs disaggregated (Alesina 2000). This lack of transparency has complicated the effective management of social sector spending, particularly for social assistance programs.

## IV. Options and Recommendations for Reforming Colombia's Safety Net

Colombia's social safety net is in need of fundamental reforms that will require political will, consensus, and new policies. This section sets out an agenda for reform that can serve as the basis for a debate and development of a strategy for establishing a social-risk-management system.

The main message of this Chapter is that the new administration taking office in 2002 should establish a reformed Social Risk Management System. The government of Colombia should engage key stakeholders in a strategic planning exercise to define the appropriate composition, management, and administrative structure of a new social-risk-management system. A logical time frame for this structural reform would be 2004, when evaluation results are available from RAS and the main ICBF child welfare and SENA training programs, using the opportunity to establish a strategic social-risk-management system. Engaging in a comprehensive safety net reform would reverse the traditional oversight of this important, underfunded sector and allow Colombia to better address present vulnerabilities and the negative social consequences of future shocks. As laid out below, the reform of the social safety net should focus both on establishing a countercyclical element to address transient vulnerabilities in times of crisis, and on improving the efficiency and effectiveness of the structural element of the safety net that addresses chronic vulnerabilities. The recommendations presented below can be used to help shape this strategic planning process.

Three principles guide the proposed recommendations in this section. The first is that current fiscal constraints make it unrealistic to think of fresh, sustainable sources of funding for social assistance. Therefore, the proposed reforms are focused on reallocation and cost recovery. Second, with the inclusion of the new RAS programs, Colombia has programs for addressing the principal risks faced by each of the main age groups, and programs for key special circumstances groups (see Annex Table A). Therefore, we do not argue for creating new social assistance programs, but present options for how to better structure the system of existing programs, including the RAS. Third, we argue that the social safety net has a role to play in both crisis and noncrisis times to meet the needs of the chronic vulnerable, the transient vulnerable, and special circumstances groups.

### *a) Recommendation 1: Increase Resources for Social Assistance*

Colombia's social assistance budget is inadequate to meet the needs of vulnerable populations even during normal times. Two strategies are recommended for increasing the budget for social assistance under present fiscal constraints.

First, Colombia should consider redirecting funds to well-targeted social assistance programs. For example, a full redirection of funds from the National Training Service (*Servicio Nacional de Aprendizaje*, SENA) to social assistance would bring budgeted expenditures for social assistance from 0.7 percent of GDP to 1 percent of GDP—a bare minimum for a country at Colombia's stage of development, particularly given the vulnerabilities present in Colombia today and the shocks likely to manifest themselves in the near future. This will be particularly critical when financing for the new Social Support Network (*Red de Apoyo Social*, RAS) programs runs out in 2004. Other less-well-targeted programs such as the *Cajas de Compensación*, and programs outside of the social sectors, should be examined with an eye toward potential reallocation.

Second, poverty targeting should be used to generate cost recovery from less-poor groups being served by social assistance programs. The government of Colombia can no longer afford to subsidize social welfare programs for the nonpoor. For programs serving the structural–chronic poor, efficiencies could be gained through applying an improved SISBEN proxy means test. For example, the ICBF family welfare agency could explore using SISBEN to establish poverty rankings for beneficiaries of its daycare programs and apply a sliding-scale fee to generate cost recovery from the less-poor users, particularly of the CAIPS formal daycare centers, which are not as well targeted. This would allow the services to remain viable within low-income communities, where several studies point to high demand for daycare. The savings could be used to increase the quality of the services provided and to expand coverage. However, this should be introduced on a pilot basis to ensure that its administration is not overly complex and that there are no negative social repercussions to variable rates for childcare in low-income communities. In addition, cost recovery and variable subsidies could be introduced in other programs.

### *b) Recommendation 2: Focus on Streamlining the Existing System, not Creating Additional Programs*

The present system of social assistance programs needs reform. As argued earlier, Colombia's safety net lacks strategic focus and is composed of too many programs with too few resources. At the very least, reforms should focus on working within the existing system to improve poverty targeting, eliminate excessive program overlap and fragmentation, and restructure existing programs to improve coverage and quality. A more radical approach would develop a wholesale alternative to the existing system by replacing existing programs with a new system drawing on principals of social insurance, as was done in the health system. What should clearly be avoided is the creation of new programs as add-ons to the existing system.

Following are several basic issues that need to be addressed regardless of the particular reform selected:

- ELIMINATION OF PROGRAM OVERLAP AND FRAGMENTATION. The RSS social fund has too many underfunded small programs to sufficiently focus on its core objectives of reducing elderly poverty and assisting the internally displaced population. An obvious solution would be to eliminate or transfer other RSS programs that do not address these needs. ICBF should also undergo a review of the multiplicity of programs under its jurisdiction in order to improve quality and efficiency.
- IMPROVING THE QUALITY OF DAYCARE AND NUTRITION PROGRAMS FOR THE POOR. A first priority would be to evaluate the ICBF family welfare agency's CAIPs (the formal daycare centers) and HCBs (the community daycare centers) to clarify anecdotal evidence that quality of CAIPs was "enormously higher" than quality provided by HCBs (Perotti 2000). It should not be forgotten, however, that the unit cost of the CAIPs is on average over twice that of the HCBs, and that HCBs are well targeted to the poor. It is also possible that—even with a lower quality than the CAIPs—HCBs still provide a sufficient level of service to attain a minimum standard. It may also be feasible to improve the level of care provided in HCBs with low-cost alternatives, such as upgrading the skills of HCB community mothers. ICBF's extensive food pro-

duction, purchase, and distribution system should also be reviewed with an eye to increasing efficiency.

- EXPLICITLY CONSIDERING THE LONG-TERM ROLE OF THE NEW RAS PROGRAMS. In determining the programmatic composition of a reformed safety net, the long-term role of the RAS programs needs to be explicitly considered. Several of the main gaps in Colombia's public risk-management interventions are being filled by the three new RAS programs. Without income support and cash transfer programs such as those established by RAS, Colombia's safety net would be unbalanced (see Annex Table A). There is therefore a need to assess which RAS programs should remain as part of the permanent safety net, either as programs to address structural vulnerabilities or as cyclical programs implemented during times of crisis. The characteristics of the recent crisis suggest that the workfare and youth training program may be best suited to countercyclical functions. Impact evaluations of both RAS and other social programs with similar objectives (including SENA short courses and ICBF nutrition programs) should guide the composition of the social safety net, lest the RAS create another overlapping institutional layer within the network of existing programs.[12]
- MIGHT BE A ROLE FOR INCREASED DECENTRALIZATION. The management of several of the main social programs—including ICBF and SENA—is strongly centralized and funding of programs narrowly earmarked within these institutions. Reforms promoting decentralization and allowing greater autonomy and flexibility to tailor programs and overall safety net responses to the particular needs of local areas should be carefully considered, piloted, and evaluated. Options involving the private sector and NGOs should be explored and evaluated as a way to improve efficiency, effectiveness, and coverage.

### *c) Recommendation 3: Establish a Countercyclical Element of the Safety Net*

There is a need to establish a countercyclical safety net strategy that would enable the government of Colombia to respond quickly to the next economic crisis. A priority area for action is to determine the specific norms and procedures under which the countercyclical safety net would operate to meet the needs of affected vulnerable groups during times of crisis. This should include establishing triggers for the immediate expansion of selected, pre-identified programs, when the country is hit by a crisis. Another key step in setting up a countercyclical strategy is to determine the institutional and management structure of the strategy. The temptation to establish a separate institution to manage the countercyclical element should probably be avoided, given the multitude of existing programs and the existence of organizations responsible for policymaking and analysis in Colombia. Instead, the management structure proposed above should be adapted to address countercyclical issues. A third element is the determination of which programs would compose the "basket" from which the countercyclical element would draw for expansion during times of crisis. Finally, financing for countercyclical responses needs to be addressed.

---

[12] See *Secretaria de Desarrollo Social,* 1999 and 2000, for a review of Mexico's experience in introducing the *Programa de Educación, Salud y Alimantación* (PROGRESA) program as part of a larger reform of the social safety net.

### *d) Recommendation 4: Addressing the Needs of the Internally Displaced Population*

The internally displaced population (IDP), over half of whom are estimated to be children, should receive priority attention from a reformed safety net. This focus is warranted by the size of this vulnerable group, the concentration of risks within its population, the probable lack of access to programs to address their needs, and the possibility of increased displacement given the state of conflict in Colombia. The international community and government of Colombia should move beyond humanitarian assistance to address the education, health, and training needs of the IDP. These efforts could be concentrated in the regions receiving the bulk of the displaced, under joint action plans developed with those departments and municipalities. Although the needs of the IDP warrant special attention, care should be taken not to establish a parallel system for the IDP, and attention should be directed toward ensuring that there are no barriers to access preventing the IDP from benefiting from critical social assistance, health, and education programs. Several types of actions could be considered, including directly supporting the government of Colombia's action plan, implementing the Social Solidarity Network (*Red de Solidaridad Social*, RSS) programs for the displaced, ensuring that qualifying IDP have access to the RAS safety net programs, and mobilizing the education sector. Given allegations of their misuse in other countries, the need for individual lists of IDP should be reviewed, and, if their use is deemed necessary, their security should be ensured.

## V. Conclusions

The issues outlined in this Chapter should serve as points of departure for a thorough debate on how best to establish a solid social safety net in Colombia. This dialogue has begun, but needs to be broadened and deepened. Several reforms have already been introduced. However, key changes still need to be implemented to ensure the establishment of an effective social safety net in Colombia. Certain reforms could be instituted in the short term, while others would benefit from a thorough evaluation of key programs and an extended national debate. This opportunity for extensive reform will present itself in 2004, when the impact evaluation results of the RAS programs are available. Evaluations of the main social assistance programs and the SENA training program, currently under discussion, should be carried out to facilitate a comparative review of the main safety net programs. These results should be used to inform a thorough restructuring of the social safety net to ensure needed financing, agility, and effectiveness. Placing a new social risk-management system on solid ground will also require an examination of the role of social insurance and labor regulations, both of which will need to be addressed in the near future.

# Annex

Table A. Social Risks and Social Protection Programs in Colombia, 2000

| | | *Prevalence*[1] | | *Social Protection Programs* | | |
|---|---|---|---|---|---|---|
| *Type of Risk* | *Risk Indicator* | *No. Affected* | *Percentage* | *Existing Social Assistance* | *New Social Assistance* | *Social Insurance* |
| Age 0–6<br>(population 4,873,000)[2] | | | | | | |
| Stunted development | Severe chronic malnutrition (age 0–5)[3] | 657,000 total<br>255,000 Q1<br>154,000 Q2 | 13.5% total<br>19.7% Q1<br>12.5% Q2 | ICBF school feeding<br>ICBF CAIP formal day-care/ECD<br>ICBF HCB informal day-care/ECD | RAS *Familias en Acción* Conditional cash transfer (health and nutrition grant) | ISS health insurance (contributory and subsidized regimes) |
| Limited early childhood development | Preschool or daycare attendance (age 0–7)[4] | Not attending:<br>3,562,000 total<br>1,124,000 Q1<br>978,000 Q2 | Not attending:<br>54% total<br>62.9% Q1<br>58.7% Q2 | | | |
| Age 7–11<br>(population 5,171,000)[5] | | | | | | |
| Low human capital development | Net primary school enrollment (ages 7–11) | Not enrolled:<br>707,000 total<br>194,000 Q1<br>184,000 Q2 | Enrolled:<br>83.6% total<br>84.3% Q1<br>83.2% Q2 | None | RAS *Familias en Acción* Conditional cash transfer (education grant) | ISS health insurance (contributory and subsidized regimes) |
| | Overage (average years behind) (ages 7–11)[6] | | 0.20 years total<br>0.44 Q1<br>0.24 Q2 | | | |

*(continues on next page)*

**Annex Table A. (continued)**

| | | *Prevalence*[1] | | | *Social Protection Programs* | |
|---|---|---|---|---|---|---|
| *Type of Risk* | *Risk Indicator* | *No. Affected* | *Percentage* | *Existing Social Assistance* | *New Social Assistance* | *Social Insurance* |
| Age 12–18 (population 6,059,000) | | | | | | |
| Low human capital development | Secondary enrollment (ages 12–17)[7] | Not enrolled:<br>1,901,000 total<br>608,000 Q1<br>468,000 Q2 | Enrolled:<br>62.8% total<br>47.7% Q1<br>58.3% Q2 | PACES voucher program, but being phased out | RAS *Familias en Acción* Conditional cash transfer (education grant) | ISS health insurance (contributory and subsidized regimes) |
| | Overage (average years behind) 12–17[8] | | 0.82 years total<br>1.37 Q1<br>1.02 Q2 | | | |
| Health | Female teenage pregnancy (15–19 years)[9] | 420,000 total | 19% total<br>(26% rural) | | | |
| Low income | Inactivity[10] (ages 12–17) | 680,000 total<br>202,000 Q1<br>187,000 Q2 | 13.3% total<br>17.4% Q1<br>16.7% Q2 | | | |
| | Unemployment as percentage of the economically active population (ages 12–18)[11] | 497,000 total<br>119,000 Q1<br>129,000 Q2 | 30.5% total<br>28.1% Q1<br>34.3% Q2 | | | |
| | Informal sector as percentage of all employed (only 7 major cities, ages 15–19)[12] | 244,000 total<br>46,000 Q1<br>49,000 Q2 | 79.0% total<br>94.5% Q1<br>87.6% Q2 | | | |
| Age 19–64 (population 22,261,000) | | | | | | |
| Low income | Unemployment as percentage of economically active population | 2,705,000 total<br>542,000 Q1<br>550,000 Q2 | 15.8% total<br>22.0% Q1<br>19.1% Q2 | | *RAS Jovenes en Acción* youth training<br>*RAS Empleo en Acción* workfare | ISS health insurance (contributory and subsidized regimes) |
| | Informal sector as percentage of all employed (7 major cities, ages 20–59)[13] | 2,999,000 total<br>526,000 Q1<br>586,000 Q2 | 57.9% total<br>85.7% Q1<br>70.4% Q2 | | | |

**Annex Table A. (continued)**

| Type of Risk | Risk Indicator | Prevalence[1] No. Affected | Prevalence[1] Percentage | Social Protection Programs Existing Social Assistance | Social Protection Programs New Social Assistance | Social Protection Programs Social Insurance |
|---|---|---|---|---|---|---|
| Age 65+<br>(population 2,452,000)<br>Low income | No pension | 2,111,000 total<br>474,000 Q1<br>399,000 Q2 | 81.8% total<br>98.0% Q1<br>97.5% Q2 | RSS *Revivir* | None | Pension system for formal sector employees |
| | Informal sector as percentage of all employed (7 major cities, age 60+)[14] | 234,000 total<br>38,000 Q1<br>39,000 Q2 | 82.7% total<br>96.8% Q1<br>90.5% Q2 | | | |
| General Population<br>Poor health | Access to health insurance | 19,000,000 uninsured | 47% uninsured | *Cajas de Compensación*<br>Utilities subsidies<br>INURBE/rural housing programs | None | ISS health insurance (contributory and subsidized regimes) |
| Low-quality housing | No piped water | 5,836,000 total<br>2,637,000 Q1<br>1,486,000 Q2 | 14.3% total<br>32.3% Q1<br>18.2% Q2 | | | |
| Violence and displacement | No electricity | 1,975,000 total<br>939,000 Q1<br>498,000 Q2 | 4.84% total<br>11.5% Q1<br>6.1% Q2 | | | |
| | Displacement | 400,000–1.9 million[15] | 1% to 5% total | RSS program for displaced | | |

(continues on next page)

**Annex Table A. (continued)**

---

*Note:* This Table covers the principal federal social protection programs. Unless otherwise noted, estimates were carried out by *Departamento Nacional de Planeación*'s DDS and SES divisions using *Encuesta Nacional de Hogares* data from September 2000.

1. Per capita income quintiles using DNP estimates.
2. Population age 0–5 (DANE).
3. DANE–PROFAMILIA DHS data.
4. Survey of Living Conditions (*Encuesta de Calidad de Vida,* ECV) 1997, DNP *Misión Social* estimates in "Informe final: ICBF," Fedesarrollo. Estimates include HCB, CAIP, and all other preschool/daycare institutions.
5. Population age 6–11.
6. Overage is defined as the average number of years children in this age group are behind with respect to their corresponding grade level.
7. Net secondary school enrollment is calculated as the number of children age 12–17 who are in secondary school divided by the total number of children age 12–17.
8. Overage is defined as the average number of years children in this age group are behind with respect to their corresponding grade level.
9. Represents women in this age group who are pregnant or have a child.
10. Neither study nor work.
11. The economically active population is defined as either having worked a certain number of hours recently, or being without work, but having actively pursued employment.
12. Only data from seven cities (Barranquilla, Bogotá, Bucaramanga, Cali, Manizales, Medellin, and Pasto) are included in this calculation; the total number of people working in the informal sector nationwide is much higher.
13. Only data from seven cities are included in this calculation, and only people age 20–59 are included, whereas the definition of "labor force" typically includes younger and older people. Therefore the total number of people working in the informal sector nationwide is much higher.
14. Only data from seven cities; the total number of people working in the informal sector nationwide is much higher.
15. *Consejo Nacional de Política, Económica y Social* (CONPES) memo on displaced population, 2000; CODHES–UNICEF, 1999.

## References

*The word "processed" describes informally reproduced works that may not be commonly available through libraries.*

Alesina, Alberto. 2000. "Institutional Reforms in Colombia." Harvard University. Processed.

Arriagada, Ana Maria, Tarcisio Castañeda, and Gillette Hall. 2000. "Managing Social Risks in Argentina." World Bank Human Development Department, Social Protection Group, Latin America and Caribbean Regional Office. Washington, D.C.

Ayala, Ulpiano, Barrera, Henao, and López. 2000. "Diagnóstico, Antecedente y Algunas Propuestas para un Plan de Empleo de Corto y Mediano Plazo." Fundación Ideas para la Paz.

Ayala, Ulpiano, Alejandro Gaviria, Ariana Ortiz, and Marta Luz Henao. 2001. "Hacia una Red de Protección Social Para Colombia." Fedesarrollo. Bogotá, Colombia.

CODHES and UNICEF. 1999. "Un País que Huye. Desplazamiento y Violencia en una Nación Fragmentada." Bogotá, Colombia.

CONPES–DNP Plan de Acción para la Prevención y Atención al Desplazamiento Forzoso. 1999. Document #3057. Bogotá, November.

CRECE (Centro de Estudios Regionales Cafeteros y Empresariales). 2001. "Diseño del Marco Normativo e Institucional y del Esquema de Toma de Decisiones de la Red de Protección Social." Manizales, Colombia.

De Ferranti, David, Guillermo Perry, Indermit Gill, and Luis Servén. 2000. "Securing Our Future in a Global Economy." World Bank Latin American and Caribbean Studies. Washington, D.C.: World Bank.

Dulitzky, Daniel, Michele Gragnaloti, and Kathy Lindert. 2001. "Social Protection Expenditure Review." August 2001 draft, World Bank. Processed.

Ehrlich, Isaac, and Becker, Gary. 1972. "Market Insurance, Self-Insurance and Self-Protection." *Journal of Political Economy,* 80: 623–48.

Gaviria, Alejandro. 2000. "Sobre quien ha recaído el peso de la crisis? Un análisis preliminar usando la Encuesta Social de Fedesarrollo." Fedesarrollo. Bogotá, Colombia.

Giugale, Marcelo M., Olivier Lafourcade, and Vinh H. Nguyen, eds. 2001. "Policy Notes for Proposed Structural Fiscal Adjustment Loan." Washington, D.C.: World Bank. Processed.

González, Mary Lisbeth. 2001. "Colombia: Dimensiones Sociales de la Crisis." World Bank Human Development Department, Latin American and Caribbean Region. Washington, D.C. Processed.

Heckman, James, and Carmen Pages. 2000. "The Cost of Job Security Regulations: Evidence from Latin American Labor Markets."

Heitzman, Karin, R. Sudharshan Canagarajah, and Paul B. Siegel. 2002. "The Sources of Vulnerability: A Rationale and Guideline for the Assessment of Risks and Risk Responses." Social Protection Discussion Paper Series, Human Development Network. Washington, D.C.: World Bank. Processed.

Kugler, Adriana, and Maurice Kugler. 2001. "Effects of Payroll Taxes on Employment and Wages: Evidence from the Colombian Social Security Reform." Washington, D.C.: World Bank. Processed.

López Castaño, Hugo. 2001. "Mercado Laboral Colombiano: Funcionamiento y Barreras Institucionales." Washington, D.C.: World Bank. Processed.

Partridge, William, and Jairo Arboleda. 2001. "The Population Displaced by Armed Conflict in Colombia." Washington, D.C.: World Bank. Processed.

Perotti, Roberto. 2000. "Public Spending on Social Protection in Colombia: Analysis and Proposals." Fedesarrollo. Working Papers Series. Bogotá, Colombia.

Profamilia. 1995. "Encuesta Nacional de Demografía y Salud 1995." Bogotá, Colombia.

______. 2000. "Salud Sexual y Reproductivo: Resultados Encuesta Nacional de Demografía y Salud 2000." Bogotá, Colombia.

Ramírez, Clara and others. 2000. "Coyuntura económica e indicadores sociales. SISD. Sistema de Indicadores Socio-demográficos para Colombia." Departamento Nacional de Planeación: Boletín No. 26. Bogotá, Colombia.

Ravallion, Martin. 1998. "Appraising Workfare Programs." Washington, D.C.: World Bank.

Sarmiento, Alfredo, Clara Ramírez, and Liliana Claudia Delgado. "Gasto social: Gasto público en servicios sociales básicos en Colombia. SISD. Sistema de Indicadores Socio-demográficos para Colombia." Departamento Nacional de Planeación: Boletín No. 21. Bogotá, Colombia.

Secretaria de Desarrollo Social. 1999. "Más Oportunidades para Familias Pobres: Evaluación de Resultados del Programa de Educación, Salud y Alimentación (Progresa). Primeros Avances." México.

______. 2000. "Está Dando Buenos Resultados Progresa? Informe de Resultados de una Evaluación Realizada por el IFPRI." México.

Suryahadi, Asep, and Sudarno Sumarto. 2001. "The Chronic Poor, the Transient Poor and the Vulnerable Groups in Indonesia Before and After the Crisis." Draft. SMERU Research Institute. Jakarta, Indonesia.

*The Economist.* 2001. "Colombia Survey: Drugs, War and Democracy." April 19.

United Nations High Commissioner for Refugees. 2000. "Global Appeal: Funding and Donor Relations." Geneva: ATAR Roto Presse S.A.

Vélez, Carlos Eduardo, Vivian Foster, Mauricio Santamaría, Natalia Millán, and Bénédicte de la Brière. 2001. "Colombia Poverty Report." Washington, D.C.: World Bank. Processed.

Walton, Michael, and Tamar Manuelyan. 1998. "Social Consequences of the East-Asian Financial Crisis." Washington, D.C.: World Bank.

World Bank. 2001a. "Social Protection Sector Strategy: From Safety Net to Springboard." Washington, D.C.: World Bank.

______. 2001b. *World Development Report.* Washington, D.C.: World Bank.

______. 2001c. "Colombia Fiscal Strengthening Program—Policy Note on the Reform Agenda and Fiscal Sustainability." Washington, D.C.: World Bank.

______. 2002. "The Social Safety Net in Colombia: Issues and Options in the Face of Economic Shock." Report #22255-CO. Washington, D.C.: World Bank. Processed.

# 24

# Higher Education

*This Chapter was written by Lauritz Holm-Nielsen.*

## I. Quality Expansion of Higher Education: Governance and Financing

There is increasing pressure in Colombia for reform of the higher education sector.[1] A growing number of secondary-school graduates have had to abandon their desire for higher education, yet employers progressively demand advanced skills, confirming the high and growing value of higher education for both the individual and society. Those pressures stimulated an impressive doubling of enrollment in the mid-1990s, which nevertheless has proved inadequate to accommodate the external needs and, which, furthermore, have brought rising concerns of inferior quality and obsolete study programs. Therefore, considerable attention by both insiders and outsiders has been devoted to reform of the sector. There are signs of consensus on a long-term policy agenda, but short-term actions need to be taken.

## II. Emerging Trends in Colombia's Higher Education

RAPID EXPANSION IN ENROLLMENT IN EARLY 1990S BUT REVERSED IN LATE 1990S. Colombian higher education expanded rapidly in the early and mid-1990s. Coverage—enrollment in relation to the size of the cohort aged 18 to 24—rose from 9 percent to 16 percent, and the system currently instructs 900,000 students a year. The expansion was primarily led by the private institutions, which increased their share of enrollment. However, the sharp recession from 1998 until 2000 severely limited the

---

[1] This Chapter builds on "Colombia: Tertiary Education, Paving the Way for Reform," World Bank (2002), and eight commissioned background studies.

126

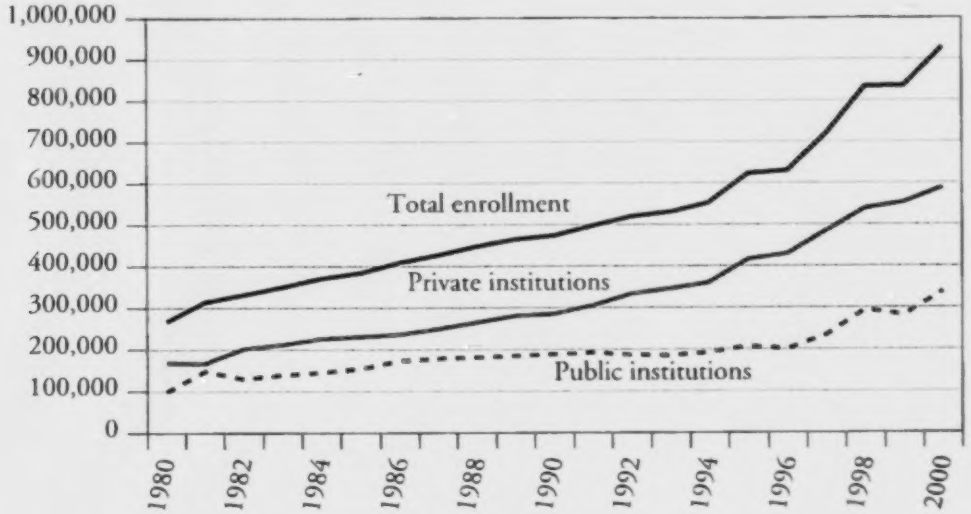
households' means to investment in higher education. This led to an abrupt reversal of the expanding trend, with the number of entrants into higher education declining by 100,000 students over a three-year period. The public sector was affected by the economic crisis to a lesser extent, but has not been able to absorb the decline. Consequently, the continuation rate from secondary education to tertiary education decreased to a 30-year low of 40 percent. The decline contrasts the development in the labor markets, where workers with higher education were the only education group that experienced a real wage increase during the last decade (by more than 30 percent). On the quality side, the proliferation of private providers led to mounting concerns about the lack of quality in certain segments of the market, including the technical and technological institutions. So far, efforts to promote quality are mostly pursued through accreditation procedures. Nevertheless, less than one in five programs is accredited.

TERTIARY EDUCATION PROVIDERS. Colombia's tertiary education is a segmented market: the public sector tertiary enrollment accounts for about 33 percent, while the private sector accounts for 67 percent. As is the case in many countries, economic constraints have limited the government's ability to fund the expansion of tertiary education. Private institutions in Colombia have traditionally played a greater role in the sector than in most other countries, resulting in a private sector that is well integrated into the overall tertiary system. Until approximately 1950, public universities enrolled over 60 percent of all undergraduate students. After that time, enrollment in private institutions began to rival that in public institutions. Currently, the private sector captures more than two thirds of total tertiary enrollment. In 1999, the public sector enrolled over 294,000 students (about 33 percent of total enrollment, undergraduate and graduate), while the private sector accounted for a little over 67 percent of total enrollment, or just over 583,000 students.

Figure 1 shows that during the 1990s enrollment in the private sector grew at a rate of 25 percent per year, compared to an expansion rate of just 10 percent per year in the public sector. The slower growth in the public sector can be attributed to government policy, which provides priority of funding to basic education.

INCREASING DEMAND FOR WORKERS WITH HIGHER EDUCATION. Colombia is at the juncture of its economic development where its economy is increasingly being influenced by an increase in technology levels brought about by increased exposure to foreign direct investment and international trade. This has unleashed a huge demand for tertiary education. In order to make use of new technologies coming from abroad, countries at Colombia's stage of development need a skilled labor force. This message is important for Colombia since the country relies to a great extent (59 percent) on the export of natural resources and agricultural products, where cutthroat competition and high price volatility reign. Without a high-functioning, flexible tertiary education sector that bestows domestic producers with sufficient, high-quality graduates, the private sector is unlikely to develop new and improved products or production techniques. Today, the annual growth in demand for tertiary workers has been larger

**Figure 1. Expansion in Tertiary Enrollment Led by the Private Sector (Private and Public Enrollment, 1980–2000)**



*Source:* ICFES *Estadísticas de la Educación Superior* various years

in Colombia (and other Latin American countries) than in the United States. During 1990–95, for example, annual growth in demand for tertiary workers in Colombia was around 11 percent, and around 7 percent during 1995–99. In that period, demand for tertiary workers in the United States rose by only 2 percent, compared to 4 percent in Argentina and Mexico, and 12 percent in Bolivia.

RISING PRIVATE RETURNS TO EDUCATION IN COLOMBIA. The limited supply of highly skilled labor, combined with the increased demand for workers in the expanding technological frontier and the integration of national markets, places the lucky few with tertiary education in a favorable position in the labor market. The typical worker with a tertiary education earns COP886,000 per month, the equivalent of US$392, which is 275 percent more than the average worker, and more than 6.5 times the wage of a worker with no education (Table 1). Returns to tertiary education are high and rising, and were particularly so in the 1990s. The private returns to each year of tertiary education reached 22 percent in 2001, more than double the returns found in developed countries. These data indicate that reversing the decline in entrants into tertiary education could yield substantial benefits to individuals and society.

The productivity of workers with tertiary education has risen considerably over the last decade due to adjustment of the Colombian economy, including deepened integration into the world economy and technological progress. Still, only 11 percent of Colombian workers have attended some form of tertiary education—compared to 24 percent of the labor force in industrialized countries—significantly undermining the country's competitiveness.

**Table 1. Urban Labor Market Indicators, by Level of Education (2000)**

| *Education Level* | *Wage (Monthly) ('000 COP)* | *Wage (Monthly) (USD$)* | *Wage in Percent of Average (Percent)* |
|---|---|---|---|
| No schooling | 137 | 62.4 | 42.6 |
| Primary | 208 | 94.7 | 64.6 |
| Secondary | 278 | 126.2 | 86.1 |
| Tertiary | 886 | 402.7 | 274.5 |
| Total workforce | 323 | 146.7 | 100.0 |

*Source:* DANE and DNP (2002).

TRENDS IN PUBLIC FINANCING IN TERTIARY EDUCATION. During the 1990s, the government gradually and significantly reprioritized spending on education (Table 2). In accordance with best practices and economic recommendations, budget support to education increased substantially from 2.2 percent of gross domestic product (GDP) to 4.3 percent in 1999. In real terms, the education sector experienced a 150 percent increase in its available budget.

Within the education budget, a shift toward basic education took place. In the beginning of the 1990s, tertiary education received 24 percent of the entire education budget. After a major revising of budget priorities in 1992, the budget share to tertiary education declined to 15 percent, and has since hovered at around 16 percent. Conventional wisdom on education sector priorities says that countries that devote more than 20 percent of their education budget to tertiary education, especially those that have not reached universal primary education, are likely to have a distorted allocation that favors an elitist system at the expense of basic education. However, as Table 2 shows, the adjustment in 1992 brought Colombia in line with current economic thought. Public funding of tertiary education in Colombia has reached its nadir, and economic rationale speaks against further reductions.

Given the current economic and fiscal situation, the prospects for increasing public funding to tertiary education remain bleak. Faced with a surging number of secondary graduates knocking on the doors to state institutions, public institutions in Colombia have responded in the best interests of the country by diversifying their revenue base and thereby accommodating more students. The introduction of and the rise in tuition constitute an important part of new income generation.

## III. A Strong But Underperforming Sector

There are several reasons why higher education is an underperforming sector. While it has a vibrant private sector involvement, perhaps one of the highest in all of Latin America, it is also plagued with problems of poor quality, inequity of access, and inefficiency. Despite the system's expansion during the 1990s, the number of new

**Table 2. Public Spending on Education (1990–99)**

| | *1990* | *1992* | *1994* | *1996* | *1998* | *1999* |
|---|---|---|---|---|---|---|
| **In Billions of COP** | | | | | | |
| Tertiary education | 686 | 632 | 711 | 982 | 1,189 | 1,201 |
| Basic education | 1,919 | 2,189 | 2,921 | 3,838 | 3,797 | 4,281 |
| Other education expenditures | 306 | 1,413 | 889 | 1,304 | 2,114 | 1,802 |
| Total education | 2,911 | 4,233 | 4,520 | 6,125 | 7,100 | 7,284 |
| **In % of GDP** | | | | | | |
| Basic education in % of GDP | 1.44 | 1.62 | 2.03 | 2.61 | 2.60 | 3.08 |
| Tertiary education in % of GDP | 0.72 | 1.34 | 0.81 | 0.97 | 1.40 | 1.18 |
| Total education | 2.16 | 2.96 | 2.84 | 3.58 | 4.00 | 4.26 |
| **Tertiary education in % of education spending** | **23.6** | **14.9** | **15.7** | **16.0** | **16.8** | **16.5** |

*Note:* Amounts measured in constant 2000 prices.
*Source:* Ministry of Education.

entrants to tertiary education began declining in 1998. The number of new entrants decreased from a high of 256,672 in 1997 to 207,246 in 1999, a decline of 19 percent. This amounts to a three-year accumulated decline in enrollments of approximately 100,000 young Colombians. The reduced dependence in the public sector on private payments has allowed the sector not only to maintain, but to increase, enrollments by 5 percent over the same period.

The underperformance of Colombia's higher education sector can be explained by a number of causes, summarized as follows:

***Lack of financing options to qualified students*** has led to a 28-percent decline of new entrants into private tertiary education since 1997, resulting in more than 150,000 unfilled seats in private institutions. The recession that struck Colombia in 1998 and that still influences the economy today, produced economic hardship and reduced enrollment by both stifling families' ability to shoulder fees for tertiary education and by reducing the State's available resources for the public tertiary education sector. This is a demand-side issue that has weakened the growth of the tertiary education sector. It is estimated that at least 100,000 graduates from the secondary school system chose not to enter tertiary education due to the high cost of schooling. Yet, the *Instituto Colombiano de Credito Educativo y Estudios Tecnicos en el Exterior* (ICETEX) provides less than 5 percent of the student population with student financing.

***Opaque and ambiguous division of responsibilities*** among regulatory bodies inhibits interagency collaboration in designing new initiatives. For instance, more than six regulatory bodies are involved in quality enhancement. Colombia has a fairly large number of government departments and agencies guiding and regulating the tertiary education system. However, they have not yielded a well-articulated governance system.

This multitude of regulatory bodies created overlapping functions. The Ministry of Education (MEN) is responsible for overall subsector planning, inspection, and supervision; policy design and subsector regulation are carried out by the MEN in concert with the *Consejo Nacional de Educación Superior* (CESU) and the *Comisión Nacional de Doctorados y Maestrías* (CNDM); the development of tertiary education is the responsibility of the *Instituto Colombiano para la Fomento de la Educación Superior* (ICFES) and the *Fondo de Desarrollo de Educación Superior* (FODESEP); issues pertaining to quality assurance are the domain of the *Consejo Nacional de Acreditación* (CNA) and the ICFES for undergraduate programs and institutions, and the CNDM for graduate programs; finally, the provision of student loans is carried out by ICETEX.

The overlap in the functions of the regulatory bodies results in a lack of clarity in the roles of the various agencies, duplication of responsibilities, and some tension between the governing organizations, as well as some confusion on the part of tertiary education institutions. For example, both FODESEP and ICFES are responsible for overall sector development and policy design, and for the support and production of sector studies. There is also overlap between ICFES and the CNA with respect to ensuring the quality of study programs. Similarly, in an effort to expand the student loan program, the government is looking at the creation of new mechanisms rather than at transforming the existing program managed by ICETEX.

UNEQUAL ACCESS: TERTIARY EDUCATION STILL FAVORS THE RICH. In Colombia, the wealthiest 20 percent of the students are 10 times more likely to enroll in tertiary education. In 1992, approximately 2 percent of the relevant-age cohort from the poorest quintile was enrolled in a tertiary education institution compared to 20 percent for the best-off quintile. As the education system expanded in the 1990s, the inequality of access to tertiary education grew in absolute terms. The largest gains in coverage occurred in the fifth quintile, where net coverage rose from 23 percent to 40 percent. Today, less than 6 percent of the 18-to-24-year-olds from the poorest quintile attend tertiary education institutions.

The fundamental reasons for inequalities in tertiary education are found outside of the system, particularly in the basic education system, including early childhood education. In summary, there is an increasingly inequitable queue at the entrance to postsecondary education. Students graduating from basic education into secondary and tertiary education are disproportionately coming from the middle-to-higher-income groups. Unless the poorer students make it onto the educational ladder, the queue will remain inequitable.

LITTLE INCENTIVE FOR PUBLIC TERTIARY INSTITUTIONS TO IMPROVE EFFICIENCY. The government allocates the budget to tertiary institutions based on historical precedence and negotiations. This funding method does not necessarily reward well-performing institutions or foster efficiency. This could explain the fact that seats in public universities cost more than in private universities.

In Colombia, the per-student outlay is estimated at COP3.6 million, corresponding to 105 percent of Colombia's GDP per capita. One year of schooling in public universities costs COP4.2 million compared to the unit costs of COP3.3 million in private universities. Hence, public universities spend 29 percent more on each student enrolled per year. Remuneration of academic staff weighs more heavily in the costs of public institutions than in private institutions. State-run universities spend 42 percent of their budgets on salaries to academic staff compared to 34 percent in private universities. Hence, the difference in unit costs does, to a certain extent, reflect a difference in spending patterns. For the remaining expenditures, the public sector mimics the private sector. The higher cost related to academic staff in the public sector corresponds with the higher teacher–student ratio existing in this sector. The state sector employs one full-time equivalent faculty member per 17 students, whereas this ratio for private universities is 1 to 27. The higher unit costs in the public sector seems therefore to be related to a higher number of faculty members per student combined with more generous benefits.

In an international comparison, the Colombian university system lies at the high end of the cost scale when comparing per-student expenditure relative to GDP per capita. One year of university education costs 5 percent more than the average income of a Colombian. This exceeds the level prevailing in developed countries, where one year of university education in general requires 48 percent of GDP per capita. For low- and middle-income countries, Colombia still figures among the more expensive systems. Within the countries where there are available data, only Chile and Malaysia spend more resources per school year than Colombia.

Underdeveloped postgraduate programs are the most critical bottleneck in the system. This bottleneck bodes ill for fulfilling the sector's future needs for qualified lecturers to replace an aging faculty and improve quality. Currently, only 2 percent of lecturers have a doctoral degree, and less than 14 percent have an advanced degree. Clearly, this underinvestment in the technical and postgraduate area will affect Colombia's competitiveness in the global economy. Colombian companies cite lack of human capital as the most important obstacle to innovation.

DECLINING QUALITY. The accreditation system in Colombia has stimulated improvements in the programs and in the institutions that have participated. Nevertheless, there is still concern that the quality of education has declined in recent years and has become less relevant in the new knowledge-based, global economy.

## IV. Policy Recommendations

These points testify to the need for an enhanced higher education sector in Colombia. To overcome these shortcomings, the incoming government could consider the following policy recommendations.

### *a) Ensure Clear and Progressive Governance*

Create an effective institutional arrangement for designing and implementing higher education policies centered on existing agencies. The Ministry of Education, the ICFES, ICETEX, COLCIENCIAS, CNA, CNDM, CESU, the *Departamento Nacional de Planeación* (DNP), and the Consultative Committee should all be involved in higher education policy design and implementation. The specific functions and authority of each agency need to be clearly defined to improve coordination of efforts and to prevent duplication and inconsistencies in policy design and implementation. The government should ensure that the policy framework is coherent and that the appropriate incentives are in place to encourage the various agencies to work together effectively. This is especially the case for the quality-assurance system, where the roles of the agencies could be clarified and differentiated further.

### *b) Direct Public Resources to Its Core Responsibilities*

What are the public sector's core responsibilities? The public sector should focus on those tasks that benefit society and which the private sector is unwilling to assume. This places a large and multidimensional obligation on the shoulders of state-funded universities. It implies that public institutions should not engage in competition with the private institutions, not because they are unable to compete, but because taxpayer resources come with a cost and should therefore not substitute for private money. Public institutions would best serve their mission, therefore, by redirecting the public resources toward areas where the social value exceeds the private value.

EQUITY. Within Colombian society, there exist large disparities in income and access to public services, including tertiary education. It is often perceived that a fundamental raison d'être of the State is to mitigate unequal conditions by providing equal opportunities. The public sector can address equity by (a) providing seats in public institutions to low-income students, and (b) accommodating students in provincial areas, where private institutions tend not to operate.

Given the necessity of private education to recover costs, the private sector most often proves unwilling to extend education beyond the large metropolitan areas. The public sector assumes the responsibility, and indeed provides more education in low-enrollment regions than its private counterparts. Budget prioritization of regions with low coverage or modest population and little private presence both improves social equity and makes economic sense. In those areas, increased funding does not substitute for private expenditures on tertiary education and, therefore, achieves the full impact of coverage.

Disciplines with a social value exceeding the value paid to the individual could be another core responsibility of public universities. Given the obligation of students enrolled in private institutions and their families to pay high tuition, career choices are typically based on anticipated (high) monetary returns from their investments in tertiary education, and therefore focus on high-yielding social fields, like law, political science, economics, and business. Society, however, depends critically upon other disciplines where the private returns diverge from the social returns. Traditionally, disciplines that serve the public, like health and education, and careers that promote rural development, like irrigation and agriculture, have been identified as having high social value. Similarly, the natural sciences and technical disciplines have been identified as being of high social value.

Colombian state institutions seem to focus on fields of study with perceived high social value. The public sector accounts for the largest share of enrollments in mathematics and the natural sciences, agricultural sciences, and education, while the private sector accounts for the majority of enrollments in the softer, high-earning disciplines like law, economics, business, and politics.

The main message is that policymakers should assure that public funding does not substitute for private resources, in which case tertiary education coverage would decline. The public sector should be selective and focused in its offering of courses.

Design a System of Scholarships for the Very Poor. Experience shows that loans might be insufficient to induce poor families to enroll a daughter or son in tertiary education. To improve equity, partial grants combined with loans could be awarded to students from the lowest two quintiles attending an eligible (accredited) institution. A limited amount—not to exceed US$20 million—could be set aside for this purpose.

Implement performance-based funding of public institutions that would reward high-performing, quality public institutions. Such discussions have taken place among stakeholders for several years, but have so far brought no changes. Clearly there is a need for more efficiency in the state-funded universities through better management, such as increasing teacher–student ratios, and so forth.

### *c) Stimulate Demand in Public and Private Tertiary Education Through Student Aid*

Reform the Current Student Aid Scheme. Student aid could help families overcome the financial burden and thereby increase enrollment. Initially, loans should be targeted to poor, academically able students. Achieving a financially sustainable student loan scheme could attract private capital, whereby the funds available for the student loan program could grow and ultimately provide loans for all students.

Student aid provides a widely implemented policy instrument allowing youth to invest in themselves despite the high costs of between 200 to 600 percent of GDP per capita for tertiary education. Financial assistance often involves a subsidy to students ranging from pure grants to implicit subsidies in student loans. Given the high and rising returns to tertiary education in Colombia and the rest of the world, student loans could be a revenue-neutral instrument that allows students to defer educational expenditures until the time when the benefits in terms of higher salaries are realized.

The existence of an extensive student loan scheme in Colombia could have shielded long-term profitable investments in human capital from the short-term economic crisis of the last four years. This could potentially have avoided the accumulated decline of approximately 100,000 graduates from secondary school who chose not to enter tertiary education. Moreover, and perhaps more important, a deferred payment scheme could have permitted academically competent graduates from secondary school to continue onto tertiary education regardless of family income.

Student financial aid is currently offered to Colombian students in the forms of government-funded scholarships, discounts from tuition and fees offered by public and private tertiary education institutions, and student loans from public and commercial banks.

Government-funded scholarships are administered on a decentralized basis. According to the latest data, the funding represents less than 1 percent of total government funding for tertiary education and assists only marginally poor students. Discounts accorded by public and private tertiary education institutions seem, according to anecdotal evidence, to play a larger role. The use of need-based tuition distinguishes Colombia from most other countries where tuition levels are the same regardless of student circumstances.

### *d) Promote Strategic Levels of Education*

EXPAND ENROLLMENT IN TECHNICAL AND TECHNOLOGICAL COURSES. This less resource-demanding kind of tertiary education could be promoted by tying a portion of financial aid to students attending these institutions. However, for this to be effective, the quality and relevance of these institutions must be improved, which could be achieved through (a) creating accreditation procedures tailored for this type of education, and (b) developing closer ties with the productive sector.

Increase the funding to—and quality of—postgraduate training, especially at the doctoral level, that provides both faculty upgrading and training for higher-level human resources in fields of national priority. Even modest resources—US$15 million—could, via research and teaching scholarships to young doctoral students, have a significant impact.

### *e) Induce and Assure Quality*

LEGALIZE THE CREATION OF PRIVATE ACCREDITING BODIES IN ADDITION TO THE EXISTING PUBLIC AGENCIES. The private accrediting organizations could be supervised by CNA or other national agencies to assure consistency. In this way, the task of accreditation would be spread among several organizations, shortening the time it takes to accredit programs and allowing accrediting agencies to keep up with the demands of the cyclical nature of the accreditation process.

ESTABLISH A NEW FRAMEWORK FOR ACCREDITATION THAT RELIES LESS ON INPUT-BASED CRITERIA. The use of an input-based accreditation model is effective in ascertaining that minimum standards are met, and may be useful in recognizing new programs. Once a program has successfully met these requirements, it is important to go beyond these criteria and examine whether the program is effective at teaching students, and that the desired learning outcomes are achieved.

KEEP, BUT CLARIFY AND REVISE, THE "HIGH QUALITY ACCREDITATION." The existence of high quality accreditation is an important development that should be protected from becoming a label for regular accreditation available to most programs.

# 25

# Science and Technology

*This Chapter was written by Lauritz Holm-Nielsen.*

The ability of a society to understand, produce, adapt, diffuse, and commercialize scientific and technological knowledge is critical for sustained economic growth and improved quality of life.[1] Countries that adopted science-and-technology-led industrialization early—and where other conditions such as market incentives and strong institutions were present—now have economies that are deeply permeated by science, technology, and innovation. These are also the countries that have grown steadily and become increasingly wealthy.

Adequate national investments in science and technology (S&T) and in research, development, and innovation is indispensable for improved competitiveness and continued economic growth, and is therefore a prerequisite for improved quality of life and poverty reduction. Government intervention in the S&T sector is justified by the assumption that research and development (R&D) activities are hampered by market failure. This follows from the assumption of nonexcludability of ideas, which implies that private actors face weak incentives to engage in R&D. In all countries, investment in advanced human capital, especially in science and engineering, is left to the public sector, because individuals simply cannot afford the costs, and private sector entities do not have the patience to wait for a returns that may accrue over decades rather than months or years. This is the main reason why national science councils, which operate transparent competitive funding mechanisms under which all sectors meet on a level playing field, is best practice in advanced economies. Colombia has such a council, the *Fundación Colombiana Francisco José de Caldas para el Fomento de las Ciencias* (COLCIENCIAS), but this council does not play an adequate role for an increasingly knowledge-based society, and it does not posses the means to stimulate the formation of a critical mass of advanced human capital and basic research. Further, the Colombian innovation system is suboptimal because of a lack of venture capital. It is an increasingly important role of governments to promote S&T development and stimulate the national innovation system by creating an investment-friendly environment and incentivizing the attraction of venture capital. Hence, Colombia is at a disadvantage and not ready to compete in the new economy.

---

[1] This Chapter builds on several World Bank documents: Agaptiova, Holm-Nielsen, and Vukmirovic, "*Science and Technology in Colombia: Status and Perspectives,*" LCSHD Discussion Paper #73, 2002; "A World Bank Strategy for Science and Technology Strategy in Development," World Bank, 2002; and David de Ferranti, Guillermo E. Perry, Daniel Lederman, and William F. Maloney, *From Natural Resources to the Knowledge Economy*, Latin America and the Caribbean publication, 2001.

This is the primary reason why Colombia should revitalize its S&T sector. Colombia's increased exposure to fierce global competition, rapid technological progress, and continued dependence on natural resources underscores the urgency of strengthening the Colombian National Innovation System.

## I. Background on Science and Technology

Funding for science and technology in Colombia averaged 0.7 percent of GDP during the last decade, a level similar to its regional competitors, but below the 2.5 percent of GDP found in developed countries. The sector is primarily driven by public resources, which finance up to 90 percent of all recorded research expenditures. The main public providers are COLCIENCIAS, the Ministry of Agriculture, and the *Universidad Nacional de Colombia*, which mostly fund basic research. In Colombia, the higher education sector plays a significant role in terms of funds allocated for R&D. The lack of private initiatives in research is in contrast to the situation prevailing in the knowledge-driven economies, where more than half of all research is undertaken privately. However, there exist strongholds of knowledge-intensive production in Colombia. In particular, the chemical industry and the transport sector, which together account for more than 80 percent of production by medium- and high-technology industries, could form the basis for sustained technological progress.

In addition to direct funding for S&T, the government has applied fiscal incentives so that private enterprises involved in R&D efforts can deduct their expenses from taxable income, and Colombia has launched tax-relief initiatives for R&D activities. Recent evidence, however, indicates that exemptions in force through the latter part of the 1990s were unsuccessful in promoting private sector participation. One reason is that tax incentives are not large enough in absolute amounts for small emerging enterprises, which rarely have a sizable taxable income.

## II. Strengths and Weaknesses in Colombia's Science and Technology Sector

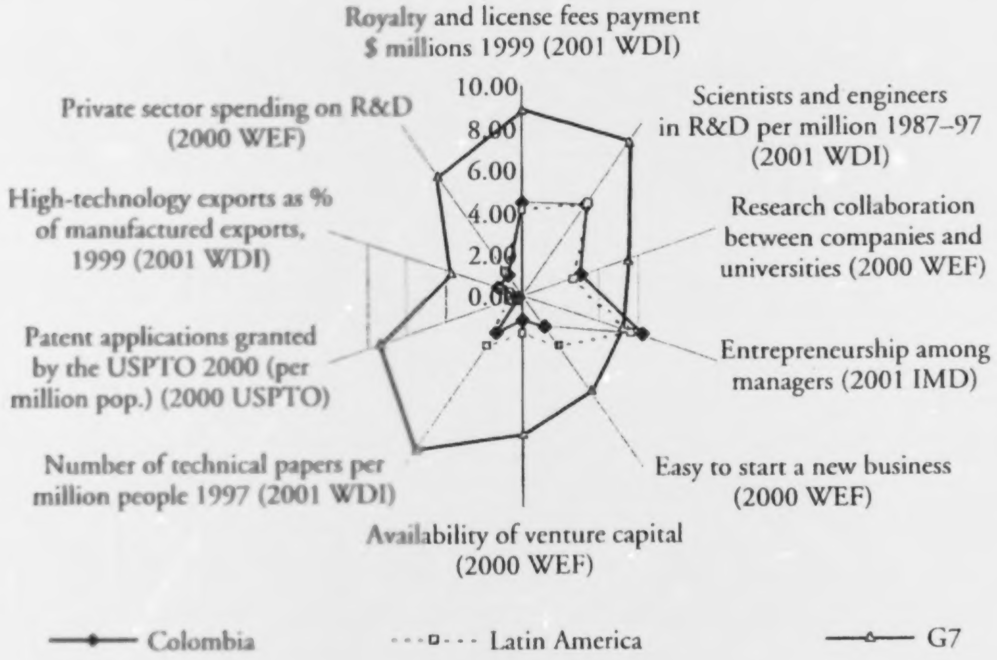
The S&T sector forms the backbone of the National Innovation System (NIS). To embrace the knowledge economy, Colombia needs to create regulations that guide the S&T sector through introducing appropriate incentives and through the development of a long-term, well-coordinated, and prioritized public policy. Figure 1 presents a selection of S&T indicators, comparing the status of Colombia with the rest of Latin America and the Caribbean and the G7 countries.

The S&T sector in Colombia has several strengths.

PRESENCE OF CENTERS OF EXCELLENCE. COLCIENCIAS, with assistance from multilateral agencies, has established several centers of excellence. Funding from these agencies, along with allocations from the national budget, have for the most part been distributed in accordance with international best practice through awarding block grants to research through competitive mechanisms. However, it is uncertain at this point whether the centers can support themselves from the sale of services or from international funding.

GROWING THE INFORMATION AND COMMUNICATIONS TECHNOLOGY SECTOR. The level of investment in information and communication technology (ICT) compared

**Figure 1. Strengths and Weaknesses in the Science and Technology Sector: Technology and Innovation Indicators**



to regional competitors is impressive in Colombia. The information infrastructure constitutes by far the most developed element of the Colombian NIS, which, according to several indicators, is approaching the G7 level. Telecommunications, liberalized in the 1990s, is one of the most dynamic sectors of the Colombian economy and accounts for around 7 percent of GDP. Turnover for the sector passed US$2 billion in 2000. Compared with other countries in Latin America, the Colombian telecommunication system is well developed, ranking third in terms of telephone coverage in the region, with 16 lines per 100 inhabitants, just behind Argentina and Chile, which have 20 and 17 lines per 100 inhabitants, respectively.

THE COLOMBIAN PRIVATE SECTOR IS TECHNOLOGICALLY WELL DEVELOPED. The value added of high and medium-high industries reaches 7 percent of GDP, which almost equals that of the average Organization for Economic Cooperation and Development country, which is 9.8 percent. However, knowledge-based industry declined 20 percent since 1994. The chemical industry dominates the knowledge-based production in the country, with more than six out of 10 knowledge-intensive products a result of work from this industrial branch. Accommodating the demands of this and other important industries in terms of human capital and assuring an open, free flow of knowledge between research centers could be an important step toward fostering a diverse and well-functioning NIS.

The weaknesses of the S&T sector in Colombia include:

LACK OF ADVANCED HUMAN CAPITAL. The NIS badly suffers from lack of advanced research skills. In 2001 fewer than three doctoral students per 1 million inhabitants were enrolled. Nine out of 10 companies in the largest knowledge-based industry, the petrochemical industry, cite lack of human capital as the main obstacle to innovation. Furthermore, Colombia—along with the rest of Latin America—has a dearth of technically educated workers, forcing companies to compete for qualified labor. The NIS suffers from the underdevelopment of two important components: human capital and regulations that stimulate innovation. These weaknesses impair technological advancement and hold back the full exploitation of the entrepreneurial, knowledge-based industries that the country possesses.

The scarcity of researchers with advanced knowledge and up-to-date skills prevents industries in Colombia from moving toward the knowledge economy. Nine out of 10 companies in the largest knowledge-based industry, the petrochemical industry, cite lack of human capital as the predominant obstacle to innovation. Furthermore, the gap of technically educated workers in Colombia leads to intense competition between companies for qualified labor.

INADEQUATE PROTECTION OF INTELLECTUAL PROPERTY. Colombia does not provide adequate and effective intellectual property protection, which reduces the incentives for private companies to innovate. As a result, it remains on the special U.S. "Watch List" of countries with inadequate intellectual property rights protection. Without proper intellectual property protection, companies will not be able to reap the returns of expensive innovation activities, and therefore often opt to buy foreign technology.

REGIONAL DISPARITIES IN PUBLIC RESEARCH FUNDING. Until 1996, the district of Bogotá received all the public resources budgeted to S&T. The capital area still receives more than 80 percent of the funding. However, for several years public funding to the sector has built upon international best practice by awarding block grants to research through competitive mechanisms (COLCIENCIAS).

## III. Policy Recommendations

The sector has several strong points and a good foundation upon which to build. Yet, long-term, coordinated, and prioritized public policy is needed for Colombia to embrace the knowledge economy. Following is a prioritized list of policy initiatives that the incoming administration could consider in order to strengthen the country's S&T capacity.

- STRENGTHEN ADVANCED HUMAN CAPITAL. This could eliminate one of the most pressing bottlenecks to innovation in the private, knowledge-based industry. The country should promote domestic Ph.D. programs by providing scholarships to young, excellent doctoral students in exchange for research or teaching obligations. Possibly the grants could be geared toward technical and productive disciplines, which would satisfy some of the private sector's demand for innovative capacity.
- STRENGTHEN INTELLECTUAL PROPERTY RIGHTS. Without a strong property rights system private companies cannot capture the gains from innovation and, therefore, have little incentive to innovate. The Colombian government could consider fully implementing and enforcing the World Trade Organization agreement on Trade Related Property Rights. Efforts to upgrade Colombia's intellectual property rights (IPR) should be coupled with efforts to consolidate the rule of law. The rule of law in Colombia is still flawed, which in turn implies that the formally strong IPR-regime will remain weak.
- NURTURE THE GROWING INFORMATION AND COMMUNICATIONS TECHNOLOGIES. Awareness of the penetration of ICTs is high in Colombia. Its high level of investment in ICTs augurs well for the future development of knowledge-intensive industries. The government should work to promote the ICTs in both public and private educational institutions.
- DIVERSIFY RESEARCH FUNDING TO THE ENTIRE COUNTRY. This initiative could be implemented through promotion of regional research centers under a competitive funding framework and thereby contribute to a more equal industrial development of the country.

- Direct research toward the needs and interests of the private sector. A close link between publicly funded research and private sector needs increases the likelihood that basic research will translate into product innovation and thereby increases the value of Colombian products. This could be stimulated through so-called matching funds, where the private sector has to provide a certain share of resources in exchange for shared rights to results.

# 26

# Enhancing Employment Opportunities Through the Labor Markets

*This Chapter was written by Vicente Fretes Cibils and Vicente Paqueo.*

## I. The Context for Reform

A well-functioning labor market can contribute to a dynamic of sustained labor-demanding economic growth by increasing competitiveness, encouraging investment in human capital, and enhancing factor input choices that favor labor demand. An appropriate labor policy framework in Colombia would:

- stimulate employment growth and, hence, reduce unemployment;
- provide a favorable environment for accelerating investments in human capital;
- promote the movement of workers from less to more productive activities, increasing labor productivity across sectors;
- avoid biases that reduce the demand for labor; and
- promote equity.

The Colombian formal labor market is excessively rigid and there is strong evidence of real wage rigidities—minimum wages are binding and unions (particularly public sector labor unions, for example, the teachers' union) are primarily concerned with fixing wages (Maloney and Nunez 2001). As a result, unemployment has remained very high in Colombia; during the last 10 years, the average annual unemployment rate was about 14 percent, and the "natural" rate of unemployment is estimated to have increased from about 7.5 percent in 1994 to about 11 percent in 2001.

More important, during times of economic crises, unemployment rates shot up—for example, after the 1998–99 crisis, the unemployment rate increased to about 20 percent—and it has remained very high—about 17 percent over the last year. This reflects mainly real wages rigidities, and that the adjustment to decreases in the demand of labor in the labor market takes place primarily through cutting jobs.

Moreover, the informal sector, accounting for close to 60 percent of the workforce, reflects labor market "segmentation." In addition, low opportunity costs of self-employment (due to low formal sector productivity) and the weak linkages between contributions and benefits in social security in the formal sector are also reflected in the expansion of the informal labor market. While there is a (relatively) low degree of turnover, much of it voluntary in the informal market, there is, more importantly, a restricted flow of workers between the formal and informal sectors. Indeed, once adjusted for demographic and other variables, Colombia shows a considerable degree of informality (a measure of segmentation) and low turnover (a common measure of flexibility). In the presence of labor market segmentation and involuntary informality, policymakers should thus focus on reducing real wage rigidities to increase the efficiency and flexibility of labor market functioning.

While there is no substitute for high economic growth creating employment and expanding the demand of labor,[1] Colombia needs to modify its labor legal and institutional framework with four goals in mind:

- bringing explicit and implicit labor costs in line with their value to workers. When workers value a benefit less than they pay for it, they have the incentive to become informal and to remain not covered by the social security system;
- increasing wage flexibility in the short term, and avoiding increases in real minimum wages in the medium and long term. Numerous factors, including a decline in inflation, binding minimum wages, and strong labor unions, lead to frequent labor market adjustments through unemployment;[2]
- minimizing transaction costs and other barriers to more rapid adjustments by firms and good job matches for workers; and
- increasing investments in human capital. Public investments in education and training have positive impacts on equity and poverty, reduce skills bottlenecks and the need for firms to pay efficiency wages.

In many of these areas, there are net gains to be made by both workers and firms in overhauling an inefficient system—for example, both would benefit from restructuring the *parafiscales* (that is, the *Servicio Nacional de Aprendizaje* [SENA], *Caja de Compensación Familiar*, and the *Instituto Colombiano de Binestar Familiar* [ICBF]) and the severance pay system; and from improving and expanding worker training.

---

[1] GDP growth alone is predicted to account for about 84 percent of employment growth during the 2001–05 projection period—under estimated elasticities of (a) employment – GDP = 0.8; and (b) employment – labor cost = –0.5 (see López-Castaño 2001).

[2] For example, if in 1999, real minimum wages had remained constant, between 90,000 and 150,0000 jobs could have been saved—given estimated elasticity of total urban employment to real minimum wage ranging from –0.15 to -0.25.

Reform of the industrial relations and collective bargaining framework involves altering legal structures and practices that have been in place for some time now. But if placed in the context of modernizing the workplace, enhancing the technical proficiency and productivity of the worker, and thus, in the medium term, his or her compensation, common ground is more likely to be found and support generated for a coherent package of far-reaching reforms.

## II. Issues and Policy Options

### *a) The System of Social Security*

The present system of social security benefits through mandated non-wage payments has several deficiencies that (i) distort labor supply decisions; and (ii) reduce labor demand in the formal market. Moreover, in light of the large transaction costs involved in the monitoring of contributions and the delivery of services, the system produces large inefficiency losses.

With respect to distorted labor supply decisions, high mandated benefits and contributions introduce a large "wedge" between the cost of labor to the employer and the compensation received by the employee.[3] Table 1 lists the components of nonwage labor costs in Colombia, all of which represent a tax on payroll. This total "wedge" of about 50 percent is very high, even by developed country standards. The comparable "wedge" in the United States is 19 percent, in Canada 12 percent, and

**Table 1. Total Wedge on Payroll (as percent of wages)**

| | *1990* | *1996* |
|---|---|---|
| Separation Payments | 8.3 | 8.3 |
| Retroactive Separation Payments | 4.2 | 4.2 |
| Pensions (worker) | 2.2 | 3.4 |
| Pensions (employer) | 4.3 | 10.1 |
| Health (worker) | 2.3 | 4.0 |
| Health (employer) | 4.7 | 8.0 |
| Training (SENA) | 2.0 | 2.0 |
| Family Welfare (ICBF) | 3.0 | 3.0 |
| Compensation Funds | 4.0 | 4.0 |
| Pension Solidarity Fund (FSP) | | 1.0 |
| Professional Risk Insurance | 2.0 | 2.0 |
| **Total** | **37.0** | **50.0** |

*Source:* "Chapter on Pension Reform" prepared for the Structural Fiscal Adjustment Loan (World Bank 2001).

---

[3] This does not include other bonuses, such as paid vacations and 13th month's salary (which represents 6.7 percent and 8.9 percent of wages, respectively).

in the United Kingdom 14.5 percent. Even in European countries such as Spain (33.2 percent), France (38.9 percent), and Italy (37.8 percent), the "wedge" is still smaller than in Colombia. In Latin America, Chile has a "wedge" of 21 percent and Mexico has a "wedge" of 31 percent. In Argentina, the "wedge" is close to 60 percent, with an unemployment rate of more than 22 percent.

In an environment with more flexible wages, much of the incidence of these taxes could be passed down to workers as lower wages. However, in Colombia there is only a partial shifting of payroll taxes to workers in the form of lower wages (due to "downward" real wage rigidities); for example a 10 percent increase in payroll taxes results only in a 2 percent decrease in wages. Moreover, many of these payments are perceived by workers as a pure tax since the link between contributions and benefits is weak, and the quality of services delivered is poor (and is cited by informal sector workers and entrepreneurs as a reason to avoid becoming formal) (Kugler and Kugler 2001).

With regard to reduced labor demand in the formal sector, in the presence of wage rigidities, high payroll taxes increase the cost of labor and reduce competitiveness and formal employment below its optimal level. At present, there is strong evidence of wage rigidities—minimum wages are binding. In this context, the partial shifting of the payroll taxes from employers to workers implies that employment is affected. In fact, simulations of the impact of an increase of 10 percent in payroll taxes lowers formal employment by about 4 percent.

### i. Policy Options

The Colombian government has, over the last 10 years, made some progress, particularly in the area of social security reform. Nonetheless, it is necessary to deepen reforms of the structure of mandated Social Security contributions. This would include:

- eliminating (partial or total) *parafiscales*. For example, if the Compensation Fund were eliminated and all other factors remain the same, employment could increase by at least 72,000 jobs in the medium term—this estimate is on the conservative-side, as there are estimates that this increase in employment could be achieved by reducing just 50 percent of *parafiscales* financing the Fund;
- shifting the funding base for certain components that may be justifiably mandatory from highly distortionary payroll taxes (for example, SENA) to less-distortionary direct taxes (that is, fund certain components from general tax revenues);
- where possible, substituting mandated proportional contributions with fixed-quota contributions that would entitle the employee to minimum benefits while allowing additional voluntary contributions and encouraging the development of private schemes (for example, old-age retirement and medical benefits);
- reducing the "wedge" between workers' health insurance contributions and the value of actual benefits received. Colombia has introduced an important innovation through the separation of provision and finance of health services

and the introduction of managed health care competition. However, implementation of this innovative health reform needs to be strengthened to improve workers' benefits from their health insurance contributions. One important step is for the *Instituto de Seguros Sociales* (ISS) to separate its health finance operations from its health service provision operations. The government should also (a) establish an effective system of supervision (at present, the Health Superintendency is unable to carry out its function effectively); and (b) facilitate consumer access to information about the performance, cost, and quality of services provided by individual *Empresas Promotoras de Salud* (EPSs) and *Instituciones Prestadoras de Salud* (IPSs) (reducing information costs for consumers to make "informed" choices). With those measures, there would be greater transparency, less corruption, improved consumer choices, and strong competition among service providers and insurers (see Health Chapter for more details).

### *b) Labor Unions, Wages and Industrial Relations*

In general, the relative importance of unions in Colombia (as in other Latin American and Caribbean countries) has remained stagnant over time—the percentage of unionized workers with respect to the economically active population remained at about 10 percent during the 1990s. Nevertheless, unions remain primarily concerned with negotiating wages, pushing up minimum wages, creating binding constraints in the labor market and restricting the possibility of adjustment through wages in the event of economic slowdown. Moreover, the fall in inflation has made it more difficult to respond to aggregate shocks by reducing real wages (because nominal wages, particularly in the public sector, have been negotiated and adjusted weighted heavily with past inflation, and minimum wages have remained binding). Indeed, standardizing the minimum wage by the mean wage, Colombia (0.25) is far below the average for Europe (0.45) and Chile (0.34), but is above Bolivia (0.22), Brazil (0.24), and Uruguay (0.19), and at about the same level as Argentina (0.26), countries with significant restricted labor mobility, and very high unemployment. Moreover, the system of industrial relations and collective bargaining (particularly in the public sector) is not well suited to the more efficient and competitive global environment, and they are not conducive to more cooperative relations between management and labor that are essential for greater productivity, efficiency, and job satisfaction.

The Colombian government should revise the system of collective bargaining for setting up wages (including minimum wages) and the overall industrial relations (particularly in the public sector) to increase labor market flexibility. More specifically, this would entail:

REVISING THE MINIMUM WAGE SYSTEM. A minimum wage reform package that would ensure simplicity, flexibility, and compliance, and minimize potential anti-employment effects must include:

- reducing the number of parameters for establishing the minimum wage and moving toward a nonbinding minimum wage policy;
- avoiding the implementation of differential minimum wages (for example, urban versus rural);
- reducing or eliminating the role of the minimum wage as a reference index for other economic variables such as social security and income brackets; and
- introducing negotiation of wages every two years instead of every year—annual negotiations are prompted by the erosion in real wages in high-inflation periods, and this is less of a problem today with inflation in single digits.

As the minimum wage becomes less relevant and nonbinding, the role of the Permanent Commission for Concerted Labor and Wage Policies should also evolve from focusing primarily on defining minimum wage policies toward focusing on other broader strategic policy areas for labor and industrial relations;

REVISING THE WAGE SURCHARGE RATES FOR NIGHTSHIFTS, OVERTIME, AND HOLIDAYS. To promote the expansion of labor demand and the formal market (and reduce unemployment), Colombia must revise downward the surcharge rates for working outside the "normal" hours established by the law. For example, if 50 percent across the aboard on surcharge rates for nightshifts, Sundays, holidays, and overtime were adopted, the average costs of labor per hour would be reduced by about 2.5 percent. This would imply an increase in total employment of between 70,000 and 170,000 jobs—depending on the range of employment–labor costs elasticities;

DEEPENING THE SYSTEM THAT COMBINES FIRM-LEVEL, DECENTRALIZED BARGAINING WITH NATIONWIDE COORDINATION.[4] The challenges of competing in an increasingly open economy require a more flexible, decentralized system of bargaining in which bargaining occurs primarily at the level of the firm. Such a system allows firms the maximum flexibility to adapt contract negotiations to their financial situations and avoids situations in which firms in economic difficulty are forced to pay wages negotiated at the national, sectoral, or state level. It also allows greater flexibility in the development of firm-specific measures to elicit effort and encourage productivity;

SIMPLIFYING THE SYSTEM OF ARBITRATION TO RESOLVE COLLECTIVE AGREEMENTS CONFLICTS. This should be achieved through expanding the faculty of "arbiters" to tackle issues emerging from the lack of compliance or violations of collective agreements between employers and employees. This is particularly important during periods when economic and legal conditions have changed, and they affect original collective agreements—for example, the ISS with Law 100 of 1993;

---

[4] Similar to, for example, the Japanese model, which combines firm-level unions and bargaining with highly coordinated and synchronized collective bargaining processes.

ELIMINATING THE PROVISION TO EXTEND SOCIAL AND LABOR BENEFITS TO ALL THE FIRMS COMPRISING THE "INTEGRATED ECONOMIC ENTITY/GROUP." The law establishes that an "economic entity" is integrated by the principal, subsidiary, and affiliate firms as long as they perform similar or complementary activities, and extralegal labor and social benefits for the staff cannot be different among firms. Collective agreements can determine the equalization of staff benefits. Moreover, if additional benefits for the staff of one of the firms were won, then the same benefits should be extended to all the staff of the "economic entity." These provisions increase labor costs, even for those unintended firms that are part of the so-called "economic entity;"

MOVING TOWARD MORE COOPERATIVE WORK RELATIONS BETWEEN EMPLOYERS AND EMPLOYEES (INCLUDING THE PUBLIC SECTOR) WHILE ENSURING FLEXIBLE BUSINESS DECISIONS. At present, union influence (particularly in the public sector—teacher and health service providers) over matters such as training, promotions, and decisions to introduce new technologies that reduce the ability of managers to restructure jobs, change production patterns, and adapt to shifting market conditions. To increase flexibility in business decisions, legal and regulatory provisions on seniority-based promotion, compensation, and training should be eliminated; and provisions that include more flexible job ladders and assignments should be introduced—rigid seniority-based schemes impede the reward of individual performance and investment in training since neither employer nor worker can fully recover its benefits; and

REQUIRING AN ECONOMIC IMPACT ANALYSIS OF LABOR-COST-INCREASING REGULATIONS BEFORE THEIR APPROVAL. Before approving new regulations that could significantly increase labor costs, an economic analysis of their impact on wages and employment, including "winners and losers," should have been undertaken and widely disseminated. This would improve social choices through transparency of the social cost of labor regulations and recognition of their "victims," along with the benefits of those measures.

### *c) The Labor Market, Informal Sector, and Small Firms*

In the Colombian economy a modern sector coexists with the urban informal and more rural traditional sectors.[5] The urban informal sector employs about 60 percent of the workforce, produces about 40 percent of GDP, and accounts for about 70 percent of the total underemployment and about 75 percent of poor underemployment. The rural informal sector accounts for about 90 percent of the rural workforce, and behaves similarly to the urban informal labor market (particularly the agricultural labor market). In both the urban and rural informal labor markets, wages are more flexible than in the formal labor market, and thus adjustments to shocks take place more through real wage adjustments than employment. Roughly 50 percent of informal workers are informal by choice and cite greater flexibility and higher returns as the reason for entering the sector. Average compensation is slightly higher among the informal self-employed and lower among the informal salaried. However, by definition, they are not covered by basic social benefits such as pension funds, which may lead to both private hardship and public burdens late in the life cycle. Even if the labor force were to expand at a low rate of 2 percent per year, the informal will not be absorbed through growth alone.[6]

---

[5] The definition of informality includes different groups such as independent workers, domestic maids and servants, and salaried workers (employed by microenterprises). They operate in a more flexible labor market than the formal market.

Moreover, the current system of severance payments (and a system prone to involved litigation) distorts the functioning of the labor market and has, *inter alia*, the following adverse effects:

- increases labor costs (through high costs of litigation and increased uncertainty). In contracting labor, firms must incorporate the likely labor costs and legal fees in the case of a dismissal. The accompanying uncertainty and managerial distraction can lead to substantially lower labor demand and reduced employment levels.[7] The indefinite rolling-over of fixed contracts (and the interpretation of the Constitutional Court), introducing the figure of "employment stability" has added uncertainty in the labor market, reversing the reforms of the last decade to increase labor market flexibility; and
- introduces barriers to growth and expansion of small firms (in the formal market). High transaction costs of dismissals put a greater burden of severance payments on small- and medium-sized firms (in the formal market). This discourages smaller firms from hiring new workers in good times, or contracting only temporary workers. The higher implied turnover leads to less investment in training and human capital, resulting in low productivity and loss of competitiveness. Dismissal costs also discourage small informal firms from growing and becoming "formal."

---

6. Consider that capital and labor shares in production are roughly equal, and that output and capital grow at 4 percent a year over the next six years. With total factor productivity growth of 2 percent a year, there would be no net growth of employment. If output were to grow more rapidly, at 6 percent a year, net employment would increase by 2 percent a year—barely enough to absorb the flow of new entrants, much less to allow those already in the informal sector to move into the formal sector.
7. The rise in the number of wrongful dismissal cases that have challenged the "fire at will system" in the U.S. has led to a 2 to 5 percent decrease in employment despite payments that amount to only US$10 per employee. The subsidiary effects on costs thus appear to be very large—about 10 percent of labor costs at a labor demand elasticity of .3 (Dertouzos and Karoly 1993).

The government must therefore adopt policies that seek to expand employment and increase productivity in the informal sector, and facilitate small-firm growth. Both labor and firms have a common interest in continuing the restructuring of the severance pay system and the unemployment support system, and in expanding the portable individualized savings and pension systems. Thus, in addition to reducing the "wedge" between the implicit cost of formal sector labor and the market-clearing wage (see section a), the new policies should include:

REDUCING THE LEGAL COSTS OF DISMISSALS. Specifically, the indefinite rolling-over of fixed contracts must be revised, redefined, and reinstated in such a form that would overcome the figure of "employment stability," as interpreted by the Constitutional Court. In addition, the system of indemnization for unjust dismissals (under indefinite contracts) must also be standardized to reduce uncertainties for both employees and employers;

DEEPENING REFORMS IN JOB SECURITY REGULATIONS, AND EXPLORING ALTERNATIVES FOR UNEMPLOYMENT SUPPORT SYSTEMS. This would entail deepening and expanding the system of individualized accounts and developing an insurance scheme that would pool workers to finance it. However, the experience of the Organization for Economic Cooperation and Development countries clearly demonstrates the need to design unemployment insurance schemes very carefully (analyzing experiences elsewhere and the needs and characteristics of the Colombian situation) to minimize problems of perverse incentives, and to ensure its efficient and sound financial management. Fundamentally there is a tradeoff: the more risks are pooled across the population, the more workers face a disincentive to prevent being laid off or to find work;

RETHINKING SYSTEMS OF INCOME SUPPORT TO INFORMAL WORKERS. The system described previously serves mainly workers in the formal sector who contribute to individual accounts. However, the informal sector may also require some income protection mechanisms, and the current workfare program should be revisited to maximize the transfer to households. More specifically, Colombia at present is not able to fully benefit from the advantages of a self-targeting workfare program because, unlike in Mexico and Argentina, employment in temporary public employment programs is not exempted from the application of labor regulations regarding the minimum wage and mandatory *prestaciones* (fringe benefits). If Colombia wanted to make its workfare program more efficient in reaching the unemployed poor, employment in public workfare programs should be allowed to pay below the minimum wage and to offer reduced fringe benefits; and

REDUCING THE HIGH COSTS, FINANCIAL AND OTHERWISE, OF "BEING" FORMAL. This would entail the revisions, simplifications of the operations and reductions of transaction costs for registrations of informal firms. The process and costs are above average for Latin America, and could takes two to four months compared to one to three months in Brazil, Chile, and Uruguay. In general, small firms comply with some regulations and not others, but labor obligations are those most often evaded, partly because, when fully complied with, they account for more than 50 percent of annual profits (as opposed to 17 to 30 percent in Chile).

### *d) Insufficient Human Capital Accumulation*

Survey and statistical evidence suggest that there is a growing demand for skilled labor that is not being met by supply. The combination of rising relative wages and shifting labor force composition suggests that, as in other middle-income countries such as Chile and Mexico, the relative demand for skilled versus unskilled workers has shifted to favor skilled workers. Table 2 suggests that investments in education, and particularly in higher education, have remained profitable. And, in general, over the late 1980s and early 1990s, the rates of return on education (specially returns on higher education) have been above the average of selected Latin American countries. Country evidence suggests that a mix of trade and technological factors is driving the increase in demand for skilled workers.

When rising demand for skills is not met by supply, the result is a persistent shortage of skilled labor and constrained growth. It also forces firms to pay above-market-clearing wages in order to retain the workers they train, and causes segmentation in the workforce. On the supply side, the problems can be traced to:

- poor quality of educational attainment;
- an antiquated and unresponsive training system; the training system is not providing new entrants with appropriate skills;
- insufficient investment in postschool and on-the-job training. In addition to inadequate technical educational attainment, there is insufficient on-the-job training on the part of firms and workers—minimum wages reduce demand for less-productive but trainable young workers. On-the-job training is often

**Table 2. Marginal Rates of Return on an Additional Year of Education (percent for urban males age 25 to 60)**

| | *1986* | | *1992* | | *1996* | |
|---|---|---|---|---|---|---|
| *Years of Schooling* | *Colombia* | *Average** | *Colombia* | *Average* | *Colombia* | *Average* |
| 6 | 12.8 | 8.2 | 10.4 | 7.2 | 6.3 | 6.8 |
| 9 | 14.0 | 10.0 | 14.6 | 10.0 | 9.6 | 8.9 |
| 12 | 15.1 | 11.8 | 18.8 | 12.8 | 12.8 | 10.9 |
| 15 | 16.2 | 13.6 | 23.0 | 15.5 | 16.1 | 12.9 |

* Average for Argentina, Bolivia, Colombia, Honduras, Paraguay, and Venezuela.
*Source:* Wodon (2000).

associated with a propensity to introduce innovation and, thus, with productivity growth; and
- inadequate information flows; there is little sharing of information on job opportunities and skill requirements among regions and sectors.

Programs designed to encourage training (and retraining) of unskilled workers have been implemented in the past few years. Preliminary evaluations suggest that these programs, to date of limited coverage, have enjoyed some success. But as demand has now shifted toward short-term postsecondary careers, the following policies are proposed to augment efforts to train or retrain unskilled workers:

EXTENDING AND DEEPENING EMPHASIS ON TECHNICAL POSTSECONDARY EDUCATION. Technical education substantially augments the hourly earnings of workers with primary and secondary education. Public-sector-financed technical training programs must be flexible and extended to all sectors and firms participating in such programs, closely linking participating trainees and firms through apprenticeship contracts;

PROMOTING PRIVATE SECTOR TRAINING. Colombia should also expand more demand-driven, private-sector-provided training programs (such as in Chile), including providing support and promoting training programs developed "in-house"—that is, in the firms. This may also include extending the use of vouchers to allow potential trainees the choice among privately provided training modalities. Emphasis should be placed on flexible programs that can be broken down into modules, and which permit training while working;

REFORMING THE SYSTEM OF VOCATIONAL TRAINING TO EASE THE TRANSITION FROM SCHOOL TO WORK. Youth unemployment remains very high in Colombia and may be partly due to a mismatch of skills provided by the public education system and those demanded by industry. While Colombia is already piloting under the *Red de Apoyo Social* (RAS) the program *Joven en Accion* for youth (a program that is based on ChileJOVEN in Chile), and if the results of this pilot are positive, the government should expand its coverage through the allocation of new public resources and/or the reallocation of existing public resources (for example, SENA's); and

PROMOTING TEMPORARY INTERNSHIPS AND THE USE OF APPRENTICESHIP CONTRACTS (AS A WAY TO FACILITATE MARKET ENTRY FOR THOSE WHO LEAVE SCHOOL). Ideally such contracts would be designed to contain a minimum training component and would optimally allow for apprenticeship wages to be set below occupational levels. Moreover, the government could consider to modify existing provisions of apprenticeship contracts, including the elimination of "in kind" transfers and the inclusion of monetary transfers for apprenticeship with neutral effects on labor costs.

## III. Key Policy Conclusions

To stimulate employment growth and increase labor productivity, Colombia must pursue an integrated reform strategy that addresses, in a programmatic fashion (if not simultaneously), the constraints emerging from the legal and institutional labor framework. The reform program, therefore, must include:

- Rationalization of "payroll taxes" and the reduction of transaction costs for "being" formal
- Elimination of the rigidities imposed by the minimum wage and reduction of surcharge rates for working "outside" normal working hours (as defined by the law)
- Development of an unemployment protection scheme to replace costly job security regulations
- Acceleration of investment in human capital (including training in short-term postsecondary careers).

If these policies were implemented within the first year of the new administration, (together with sound macroeconomic management underpinning an average GDP growth of about 4 percent), the estimated rate of unemployment would be cut by one half (from about 20 percent in 2001 to about 10 percent in 2005).

## References

Dertouzos, J., and Karoly, L. 1993. "Employment Effects of Worker Protection: Evidence from the US." In C. Buechtermann, *Employment Security and Labor Market Behavior.* Ithaca, NY: ILR Press.

Kugler, A., and M. Kugler. 2001. "Are the Effects of Payroll Taxes Asymmetric? Evidence from the Colombian Social Security Reform." Working Paper. Bogotà.

López-Castaño, H. 2001. "Mercado Laboral Colombiano: Funcionamiento y Barreras Institucionales—Informe de Consultoria Elaborado para el Banco Mundial." Working Paper. Bogotà.

Maloney, W., and J. Nunez. 2001. "Measuring the Impact of Minimum Wages: Evidence from Latin America." Washington, D.C.: World Bank.

Wodon, Q. 2000. "Poverty and Policy in Latin America and the Caribbean." Technical Paper No. 467. Washington, D.C.: World Bank.

# 27

# Gender

*This Chapter was written by Maria Correia.*

## I. Introduction

Gender continues to be an important dimension of Colombia's social and economic development today. Specifically, gender roles—the socially ascribed roles and expectations imposed on men and women simply because of their sex—affect socioeconomic outcomes. For example, crime and violence, which are concentrated among young men, have been linked to prevailing rigid codes of male behavior that call for men to be tough, aggressive, competitive, unemotional, and dominant. A large gap in life expectancy is related to male behavior—that is, violence, alcoholism, and risky behavior—which, in turn, is linked to male gender roles and socialization patterns. Similarly, educational attainment is linked to gender roles in that poor boys are more likely to drop out of school to provide financial support to their families in contrast to girls who are more likely to be out of school because of early pregnancy or to perform domestic duties and childcare. Finally, poverty and inequality are related to gender roles in that women's lower labor market participation and earnings and higher unemployment are due in large part to societal and family expectations that women perform housework and childcare roles.

This Chapter examines the status of gender issues in Colombia today. It comprises three sections. The first provides a synthesis of advances related to gender in the areas of demographics and general health, reproductive health, education and literacy, labor force participation and wages, and rural development. The second section discusses existing gender issues as they relate to social and economic development in Colombia. The third section discusses policy directions. The Chapter takes a comprehensive approach to gender by discussing both male and female gender issues. While the effects of gender on females have been extensively researched and are generally well known, male issues have received less attention in the field of gender analysis. Thus information related to male gender issues tends to be more limited.

The Chapter has three main messages.

- First, Colombia has made significant progress in reducing gender inequalities—and in particular in improving the well-being of women. Girls have higher school enrollment levels than boys, women's fertility and maternal mortality have decreased, women's labor market participation rates have increased, and gender gaps in wages have narrowed. Women have also benefited from affirmative action rural policies, including agrarian reform programs.
- Second, while the status of females has improved, male human capital has eroded on the health and education fronts. Boys have worse completion, attainment, dropout, and repetition rates than girls—and these have been exacerbated by the crisis. Males are also more affected by HIV/AIDS, alcohol- and drug-consumption-related diseases, and violence—and both armed-conflict and crime-related deaths. Moreover, male earnings decreased between 1978 and 1988 and between 1995 and 1999, compared to the earnings of females, which have increased steadily since 1978.
- Third, important interlinkages exist between gender, poverty, and inequality in Colombia. Female-headed households are more likely to be poor and vulnerable than those headed by males. Moreover, poverty is negatively correlated with years of education, with female-headed households reporting lower education levels than male-headed households. Poverty analysis also demonstrates that mobilizing female labor during periods of recession is an important poverty-reduction strategy for Colombian households—female labor has been one of the most important household strategies for combating the effects of the recession and reducing the degree of inequality. Finally, there is compelling evidence relating family size to poverty in Colombia, suggesting that investments to increase the coverage of family planning programs would have high payoffs.

## II. Advances Related to Gender

### *a) Demographics and General Health*

Both men's and women's health indicators have improved over recent decades, reflecting the demographic transition in process throughout the Andean region.[1]

---

[1] The Colombian population doubled between the census of 1973 and 1993; after Brazil and Mexico, Colombia has the third-largest population in Latin America. The national averages obscure significant rural/urban and regional differences but, in general, the demographic profile of Colombia compares well with those of other countries in the Andean subregion.

Since the 1960s, fertility and mortality have steadily declined for both sexes. Life expectancy at birth increased from 58.5 years for men in 1973, to 67.3 years in 1999 (UNSO 1975,1999). Women's life expectancy has increased from 61.2 years in 1973, to 72.5 years in 1999 (UNSO 1975, 1999). As a result of these changes, the population has aged somewhat, although it still remains relatively young. The Colombian population under age 14 declined from 40 percent in 1980, to 32 percent in 2000. The percent of the population aged 60 or older increased from 5 to 7 percent between 1980 and 2000 (U.S. Census Bureau 2002).

Over the last three decades, health indicators have also generally improved for children of both sexes. Between 1950 and 1992, infant mortality declined from approximately 105 deaths per 1,000 live births to 37 deaths per 1,000 births (FNUAP 1995). Overall, malnutrition fell from 21 percent of children under age 5 in 1965, to just 8 percent in 1995 (PROFAMILIA 1995). Among children under age 5, diseases preventable by immunization declined from 1990 to 1994 (PAHO 1999a).

### *b) Reproductive Health*

In recent decades, Colombia has made significant improvements in health care provided to pregnant women. Overall, between 75 and 80 percent of women who gave birth during 1990–95 saw a physician and received some form of prenatal care and at least one dose of antitetanus vaccination.[2]

Improved health care for women is reflected in declining maternal mortality rates. While data on maternal mortality for Colombia are generally considered to be unreliable, and figures vary widely by source, it appears that Colombian maternal mortality rates have improved substantially in recent decades. According to the *Departamento Nacional de Planeación* (Department of National Planning, DNP), the national rate declined by over 50 percent between 1983 and 1995, from 170.5 to 81.1 per 100,000 live births.

Contraceptive use is relatively high in Colombia, particularly in urban areas and among better-educated women. According the 1995 Demographic Health Survey (DHS), 36 percent of women in union used a modern form of contraceptive. Sterilization was the most popular method, and its use has increased. Twenty-six percent of women in union have been sterilized (up from 21 percent of women in 1990, and 19 percent of women in 1986). Use of both the pill and intrauterine devices (IUDs) has remained stable in recent years, reported by 13 percent and 11 percent of women, respectively. About 11 percent of women report using traditional methods (for example, rhythm and withdrawal). As to be expected, urban women are more likely than rural women to use contraceptives and to rely on modern methods. Contraceptive use has driven the declining Colombian fertility rates—from 7.0 children per woman during 1960–64, to 2.8 children per woman in 1997 (UNSO 1999). This represents a fertility decrease of over 50 percent in less than 40 years.

---

[2] Antitetanus vaccinations during pregnancy are considered essential to prevent tetanus in newborns.

### *c) Education and Literacy*

Literacy and school enrollment rates have increased substantially for both sexes, but particularly for women.[3] Household survey data report rising enrollment rates in both primary and secondary school for both boys and girls (World Bank, forthcoming). During 1978–99, net enrollment rates increased for all age groups in both urban and rural areas (with the exception of urban boys aged 12 to 14, who saw a very slight decline in school enrollment). Urban female enrollment rates increased from 55 percent in 1978 to 70 percent in 1998. Rural female enrollment rates increased from 37 percent in 1978 to 51 percent in 1998. In Colombia, as in much of Latin America, no pronounced gender bias exists in favor of boys' education. Over the last three decades, girls aged 5 to 11 have had consistently higher school enrollment rates than boys in both urban and rural areas.

### *d) Labor Force Participation*

Over the last few decades, Colombia's economically active population (EAP) increased considerably, due primarily to female entry into urban labor markets.[4] From 1978 to 1998, the urban EAP increased from 58 to 67 percent, with male rates remaining fairly constant until 1995 and decreasing slightly thereafter, especially for people aged 15 to 24. Meanwhile, urban female participation rates for all age groups increased from 40 to 56 percent from 1978 to 1998. The rural EAP increased only slightly (58 to 60 percent) from 1988 to 1998, with male rates decreasing from 85 to 81 percent and female rates increasing from 31 to 38 percent.[5] While Colombia's overall labor activity rates are similar to those for Latin America and the Caribbean (LAC), female activity rates are higher than average. In 1995, 31 percent of all working-age women in Colombia were in the labor force, compared to an average of 28 percent for the rest of Latin America and the Caribbean (WDI 1999). At 52 percent, urban female labor force participation rates for 1998 were higher only in Paraguay (56 percent) (CEPAL 2000a).

---

[3] The provision of basic education in Colombia has expanded significantly in the last three decades. Illiteracy rates in 1999 fell to below 3 percent in urban areas and to less than 15 percent in rural areas (from 5 percent and 29 percent, respectively, in 1978).

[4] The economically active population (EAP) is defined as the proportion of people currently working or looking for work to the working-age population (WAP). In urban areas, the WAP is defined as the population aged 15 to 70, but in rural areas it is defined as the population aged 12 to 70.

[5] For males, the most important decrease was for males aged 15 to 19.

Part of the increase in women's participation rates is attributable to declining total fertility rates, particularly in urban areas. In 1978, poor households had an average of 2.1 children, and nonpoor households had an average of 0.9 children. By 1999, the number had fallen to an average of 1.4 children for poor households, and 0.6 children for nonpoor households (Vélez and others 2001). Therefore, despite the gradually aging Colombian population, the number of dependents who require care in each household is declining. This shift is likely to provide women—who traditionally carry out these tasks—with more free time to engage in remunerated activities and to encourage their increased labor force participation. Women's rising educational levels is another factor contributing to increased labor force participation, because there is a strong, positive relationship between women's educational attainment and their participation in the labor force.[6]

### *e) Wage Gaps*

Gender wage gaps in Colombia have decreased significantly in recent decades. During the 1990s, Colombia made the greatest progress in reducing the gender wage gap among LAC countries (CEPAL 1999). With the exception of Uruguay, the urban gender wage gap in Colombia is lower than that of other LAC countries. The gender wage gap in both self-employment and wage earning declined consistently between 1978 and 1995. In urban areas in 1978, the median income of females was about 80 percent that of males. By 1998, it had risen to 94 percent of the median income of males.

The gender wage gap also narrowed over the recession period, especially for less-skilled wage earners. Male earnings decreased almost monotonically between both 1978 and 1988, and 1995 and 1999. Female earnings, on the other hand, have increased steadily since 1978, and this increment was sustained over the recession. Wage gains were greatest for low-skilled females with educational levels of primary school or less. These females experienced a real wage gain of 25 percent, while males in the same category saw a real wage decline of 9 percent.

Some of this increase in women's real wages may be in response to minimum wage increases in feminized work sectors. For example, over the recession, self-employed women saw an increase in their real wages of 12 percent. Self-employed men, on the other hand, fared much worse and experienced real wage declines of 30 percent. Women's real wage increments have supported household incomes over the recession and have been invaluable in mitigating poverty for households that have more than one wage earner.

---

[6] The Inter-American Development Bank (IDB) recently studied women's labor force participation in 14 countries, including Colombia. Education was found to be the most salient factor explaining women's decisions to participate in the labor force (IDB 1999). Higher educational levels increase the economic value of women's time, and thus the marginal benefit of entering the labor market relative to the marginal costs of labor market entry. As women acquire more human capital, they are also able to command higher wages.

### *f) Rural Development*

Colombia stands out among Latin American countries in its efforts to redress gender inequities in rural areas. The country has a relatively long history of considering gender issues in its rural development policies and programs, with a particular emphasis on "affirmative action." For example, in 1984, the *Consejo Nacional de Política Económica y Social* (National Council for Economic and Social Policy, CONPES) approved an official *Policy for Peasant and Indigenous Women*, the first of its kind in Latin America. This policy attempted to improve rural women's access to productive resources, expand employment and income-generating projects, overcome barriers to political participation and literacy, and improve domestic labor conditions and nutritional status (Ospina 1998). A 1994 updated and enhanced policy added minimum targets for the number of female beneficiaries of loan and land titling programs. All else being equal, female household heads and displaced women are now given priority in land allocation, and alternative programs address the needs of those who do not qualify for land. The government also now helps organizations that represent rural women enhance their participation in decision-making bodies (Jaramillo 1998).

The 1988 Agrarian Law 30 and the 1994 Agrarian Law 160 instituted mandatory joint titling for all agrarian reform programs.[7] Special provisions are also in place to ensure the inclusion of female household heads in agrarian reform enterprises and cooperatives. Over half of the beneficiaries are couples who received joint titles to newly acquired land, and 13 percent were women receiving individual titles. Research indicates that individual female beneficiaries now receive as much, or more, land than do individual males and couples. Finally, in 1995, the government launched a new land titling program, commonly known as *Titular*,[8] to formalize squatters' rights, giving priority to "unprotected" women displaced by the violence (Deere and León 2000). The program has given 30 percent of titles to individual women.

## III. Gender Issues as They Relate to Colombia's Economic and Social Development

### *a) Conflict and Violence*

Violence accounts for one quarter of all male deaths in Colombia and a staggering 60 percent of deaths for males aged 15 to 44. Males of all ages are four times more likely than females to die as a result of homicide, are more likely to be forcibly recruited into guerilla or paramilitary groups, are more likely to become involved with increasingly violent drug cartels in an effort to earn a living (although there are some indications that involvement of females with these groups is increasing), and are more likely to be the victims of armed robbery and extortion.

---

[7] Adjudications and titles are required to be jointly titled where couples are either legally married or living together in consensual unions.

[8] The official name is the *Programa Presidencial para la Formalización de la Propiedad y Modernización de la Titulación Predial.*

160

Although overall mortality rates have decreased by almost 50 percent in recent decades, mortality rates for young males remain very high. They are particularly high in comparison with rates for females in the same age groups, and for young males in neighboring countries (CEDAW 1997). In 1994, the mortality rate for Colombians aged 20 to 24 was 0.8 and 4.8 deaths per 1,000 females and males, respectively, in that age group. By contrast, 1996 mortality rates for the same age group in Ecuador show a much narrower gender gap (0.9 deaths per 1,000 females and 2.1 deaths per 1,000 males). This unusually large gender disparity in mortality rates exists for all ages between 15 and 49, and reflects the disproportionate risk of young Colombian males dying as a result of violence.

An in-depth analysis of the causes of violence in Colombia is beyond the scope of this review. However, a World Bank overview of the primary causes of political violence in Colombia emphasizes the importance of the legacy of political conflict; unequal access to social and political power; and the role of drug-related, paramilitary, and guerilla violence (World Bank 1999a). The principal determinants of economic and social violence are attributed to poverty, inequality, and rapid growth; high levels of impunity within the justice system; a lack of educational and employment opportunities; the role of the household and family in perpetuating violence; and situational precipitators such as alcohol, drugs, and firearms.[9] Richani (1997) argues that the Colombian pattern of violence evolved during the 1980s and 1990s into a distinct, self-perpetuating system as its socioeconomic base (the drug trade, armed robberies, and so forth) expanded.

Violence has been linked to gender, that is, to the prevailing codes of conduct and rules governing men's roles. According to these codes and norms of behavior, to be a man is associated with aggression, competitiveness, achievement, sexual and physical prowess, and risk taking (Pollack 1998; Barker 1998). (Schools, the popular media, the home, the street, and peer groups, reinforce these behaviors.) Above all, male identity in most societies is to be the provider, to be responsible, and to provide financially for one's family. When these goals become difficult to achieve—which is more common among low-income men—men regularly assert their masculinity through violence, alcohol use, and other negative behaviors (Barker 1998). Further, research in low-income neighborhoods of the United States indicates that for low-income men, an exaggerated form of crime and violence (against other men and against women) is used as a way to affirm identity (ibid.). This would seem reasonable given that these low-income men likely have few ways to exert power and meet societal prevailing standards on what it is to be a man. As for Colombia, the subject of violence as it pertains to gender norms and expectations, and the ongoing political conflict, requires further research.

---

[9] Shrader (2000) notes that political, economic, and social violence are not necessarily exclusive categories. Some sectors of the population, such as younger, lower-income, and less-educated men, are more likely to be both perpetrators and victims of homicide (World Bank 1999a); and adolescent victims of childhood violence have the highest risk of becoming perpetrators.

### *b) Displacement*

Women and men have been differently affected by Colombia's armed conflict and displacement, which has expanded in Colombia over the last decade and continues to grow (World Bank 1998a).[10] Women head as many as one third of displaced households; many of these are widows fleeing with their children after their husband's murder. Moreover, women and girls are frequently victimized by sexual aggression during displacement processes. Women are often ill prepared to assume responsibility for maintaining their families in situations of social unrest and economic insecurity. They do, however, appear to be better able than men to develop support and survival networks after displacement, and can rely on existing domestic skills to find work as maids or small traders. In contrast, rural men often face higher unemployment rates after displacement because their agricultural skills are of little use in an urban environment. Moreover, in periods of crisis, men have more difficulties coping psychologically due to gender norms that dictate that men should not show their emotions. As a result, women typically display their anxiety more openly, and men's psychological stresses tend to exhibit themselves more indirectly through destructive behavior (for example, violence and alcoholism) (Correia 2001).

### *c) Domestic Violence*

As in other LAC countries, sexual and intrafamilial violence in Colombia are widespread and victims are overwhelmingly women (Gaviria 2001). Conservative estimates suggest that 20 percent of women in union have experienced domestic violence (PROFAMILIA 1995). The probability of experiencing domestic violence varies pronouncedly by income and education levels, with poor women most at risk. Education appears to insulate women and their partners from domestic violence, with each year of schooling reducing the probability of domestic violence victimization by up to 1.4 percentage points.

Females who are wage earners are more likely to suffer from domestic violence than females without such jobs, perhaps due to conflicts arising from male displacement as the primary breadwinner. According to a study on crime and violence in Colombia, male unemployment (and the loss of status as the family provider), can lead to drug and alcohol abuse, and increased domestic violence (Moser and McIlwaine 1999).[11]

---

[10] One in 60 Colombians has been forced to migrate because of violence (Meertens 1999).

### *d) Drugs, Alcohol Abuse, and Violence*

In Colombia, as in many countries, alcohol is the most widely consumed drug. According to PAHO, in 1996, 59.8 percent of Colombians over age 12 had consumed alcohol in the past year (CEPAL 2000b). Alcohol consumption is linked to numerous social problems such as domestic, sexual, and intrafamily violence. In most instances, men are the primary perpetrators, with women and children the frequent victims. Alcohol use has also been identified as a precipitating factor in street violence and homicide, where both perpetrators and victims are primarily men (World Bank 1999b).

However, alcohol is perceived to be less of a problem among Colombians than narcotics use, which is concentrated among young men. A study of perceptions of violence in poor urban communities revealed that many communities reported alcohol-related problems to be significant, but problems related to other drugs were of greater concern (Moser and McIlwaine 1999). According to the study, drug consumers tend to be young males. The use and sale of narcotics contributes to the erosion of physical and human capital and has widespread, complex, and negative effects on the lives of users and nonusers of both sexes and all ages.

### *e) Reproductive and Sexual Health*

Even though services have improved, deficiencies in maternal health care continue to exist. Twenty-nine percent of rural women, 22 percent of women aged 35 or older, and 45 percent of women experiencing a sixth (or higher) order birth receive no prenatal care. Educational levels affect women's access to prenatal care: 52 percent of women without education received no prenatal care during their pregnancies, and 25 percent of women with only a primary education received prenatal care. Women are most likely to be attended by a physician if they are between ages 20 and 34, have secondary or higher educational levels, or are having their first baby. Limitations in health care are reflected in widely varying maternal mortality rates, which in the case of the Pacific region, for example, are 50 percent higher than the national rate (125.9 per 100,000 live births). The DNP (2001) estimates that complications from illegal and unsafe abortion are the second-leading cause of maternal mortality, accounting for 17 percent of maternal deaths during 1991–95.

While fertility rates have declined over 50 percent in less than 40 years, decreases have been much smaller for both poorly educated and rural women. During

---

[11] According to that same study, male consumption of drugs (primarily among young men), is a major concern in poor urban Colombian communities, and is a source of multiple social and economic problems that affect both men and women.

1990–95, for example, the urban total fertility rate was 2.7 children per woman, compared with a rural rate of 4.4. The 1995 total fertility rate was 5.0 children per woman without education; 3.8 for women who completed primary education, 2.6 for women with secondary education, and 1.8 for women with higher education (PROFAMILIA 1995). Fertility also varies by region. It is highest in the Pacific Coastal subregion, which has a total fertility rate of five children per woman and an average of 7.1 children in its rural areas (DNP 2001).

At 92 births per 1,000 adolescent girls aged 15 to 19, adolescent fertility rates for Colombia are high when compared to those of other LAC countries.[12] Approximately 17 percent of 15 to 19 year old females are pregnant or have given birth (DHS 1995). In 1995, the average Colombian woman became sexually active at the age of 19.6 years, but strong differences exist between the urban and rural populations.[13] Urban girls do not become sexually active, on average, until age 20, while rural girls become sexually active around age 18.5. Similarly, urban girls enter their first union at the average age of 21.9 years, compared to 20.0 in rural areas (DNP 2001). As a result, rural girls have higher rates of fertility and lower age at first birth (21 in rural areas, compared to 23 in urban areas) (PROFAMILIA 1995). Girls with lower levels of education also have earlier ages of sexual activity and first union. In 1995, 15 percent of urban women between ages 15 to 19 were parents or experiencing their first pregnancy; the number is much higher (26 percent) for rural women of these ages (DNP 2001).[14]

While global contraceptive use rates in Colombia are relatively high, significant unmet needs exist for more information and services related to reproductive and sexual health. It is estimated that over half of the women using the pill may be doing so incorrectly (CRLP/CASA 1998). Among females, the greatest need for family planning information and services is among young women under age 20, rural women, and women without any formal education. Despite the lack of data, abortion rates appear to be high and closely correlated with the unmet need for contraception. In 1993 approximately 20 percent of Colombian women of childbearing

---

12. Compared with fertility rates of 88 births per 1,000 women aged 14 to 19 in Brazil in 1996, and 77 births per 1,000 women aged 14 to 19 in Peru in 1996 (DHS data, accessed 2002).

13. Age of initiating sexual activity and first union help approximate the length of the woman's reproductive life and her exposure to pregnancy. Women with earlier initiation of sexual activity have greater risk of pregnancy.

14. Higher levels of education are strongly associated with postponed sexual relations. Nationally, women with no education became sexually active at a median age of 17.5. The figure rises to 18.7 years for those with primary education, 20.9 for women with a secondary level education, and 23.6 for those with higher education (DNP 2001). Similarly, education delays women's age at first birth. Women with no education experience their first birth, on average, at 19.5 years, compared to 20.4 years for those with completed primary education, and 22.9 years for women who have completed secondary education (PROFAMILIA 1995).

age had had at least one abortion. One third of ever-pregnant women reported that they have had an induced abortion, three quarters of which were because of a lack of access to contraceptives (PAHO 1999b).[15] As in most other countries in the region, abortion is illegal in Colombia and the law penalizes both women who seek abortions and those who provide them.[16]

### *f) Male Dimensions of Reproductive and Sexual Health*

Male dimensions of reproductive and sexual health have received increased attention among health policymakers given that male involvement reduces teenage pregnancy, promotes family planning, encourages responsible parenthood, and limits the spread of HIV/STDs. In Colombia most cases of HIV/AIDS and other sexually transmitted diseases (STDs) have been diagnosed in men. UNAIDS data report that 83 percent of all adult Colombian cases of HIV/AIDS are among men (UNAIDS 2002).[17] As of the end of 1996, there was a reported cumulative total of approximately 700,000 cases of AIDS (UNAIDS 2002), and a cumulative mortality of 42 percent (PAHO, 1999a). Eighty-five percent of all diagnosed cases were among men. Colombian incidence of other STDs (such as congenital syphilis and genital herpes) is also rising.[18]

Male knowledge of contraceptive use and reproduction is poor, and their understanding of the transmission of STDs appears to be inadequate (AVSC 1997, 1998). Also, active male participation in family planning appears to be low and male contraceptive use is very limited. While 26 percent of women in union have been sterilized, only 0.7 percent of male partners have been and, as noted, only 4.3 percent of couples reported using condoms (PROFAMILIA 1995). This is consistent with findings in other LAC countries.

---

15. Unsafe and illegal abortion affects women of all ages and classes. Twenty-nine percent of women who have an illegal and unsafe abortion suffer complications. Poor, young, and rural women are the most likely to experience unsafe, self-induced, and/or unhygienic abortions. Women aged 16 to 27 have the highest incidence of illegal abortion; for girls under 15, abortion is the fourth-leading cause of hospitalization. Unlike some other aspects of maternal health in Colombia, no improvement in this situation is apparent. To the contrary, the incidence of illegal and unsafe abortion appears to have risen in recent decades (DNP 2001).
16. Unless otherwise stated, all data reported in this section are from CRLP/CASA (1998).
17. While the majority of HIV/AIDS cases are among men, a number of gender-related factors increase women's risk of contracting HIV. First, women are biologically more likely to become infected than they are to transmit STDs to their male partners. Second, gender inequalities and rigid sex roles deny women access to condoms and other devices that prevent infection. Third, strict gender roles and norms make it difficult for women to negotiate prophylactic use and to refuse unwanted sexual intercourse.
18. For example, during 1990–95, diagnoses of genital herpes increased 99.3 percent (PAHO 1999a).

Despite their importance, reproductive and sexual health programs targeting males are limited in Colombia. PROFAMILIA, which is the most active, runs three men's clinics that provide a range of services to their male clients (AVSC 1997).[19]

### g) Family Size and Poverty

Larger households are consistently more likely to be poor and extremely poor in Colombia. A simple univariate analysis of the relative risk of poverty reveals that households in urban areas with more than six members are more than 22 percent more likely to be poor than households with fewer members in 1999 (Vélez, de la Brière, and Millan 2001). Similar households in rural areas face an incremental risk of being poor of more than 10 percent in 1999. Decomposing income dynamics in terms of skill endowments and dependency ratios reveals that households headed by people with low skills benefited most from reductions in fertility during 1978–99. This holds true for both urban and rural households.

Income gains derived from real wage gains and reductions in family size are greatest for households the heads of which are less educated: real household income increased by 14 percent for households in urban areas in response to real wage increments over the period and 12 percent as a result of reductions in demographic dependency. Interestingly, income losses over the recession for households in urban areas with college graduate heads were due almost exclusively to larger family sizes (Vélez and others 2001). Households with college graduate heads lost 3.5 percent of their real household income while experiencing no change in their wage index or employment ratio. These households did experience significant reductions in their adult-to-family-size ratio as the number of dependent children rose. It is possible that these households are selecting to have children in the recession period, although evidence suggests that larger extended households are forming around college graduate heads as part of the coping strategy in response to the recession (ibid).

### h) Educational Attainment

Boys have higher grade repetition and dropout rates and, in rural areas, have lower school completion rates than girls do. In 1996, boys' primary school dropout rates were 7.8 percent, compared to 6.6 percent for girls (WDI 2001). In 1993, boys' secondary education repetition rates were 16 percent, compared to 14 percent for girls (United Nations 2000). In urban areas, grade completion rates are similar for both sexes, although in rural areas girls have higher school completion rates than boys.[20] Also, in rural areas, completion rates for both boys and girls drop by more than 25 percent between fifth and sixth grades, suggesting the importance of preventing dropout at those specific levels. Patterns, however, vary by income level. When controlling for household income, 1995 data show that boys from the wealthiest 20 percent of households have higher completion rates than girls do, while completion rates for girls from poorer households are higher than those for boys (Filmer 1999).

---

[19] Health services include general medical exams, urological services, family planning counseling and contraceptive methods, infertility testing and treatment, STD treatment, HIV testing, sex therapy, and plastic surgery. In addition, PROFAMILIA offers legal services to men for divorce, separation, and child support. The rising demand for services by men and their ability to pay for them, has allowed PROFAMILIA to subsidize other family planning services. For example, in 1986 Bogotá's men's clinic met 70 percent of its costs from fees charged for services. By 1995, the clinic was self-sufficient and generated a surplus of 21 percent over costs (AVSC 1997).

Gender differences in dropout rates suggest that boys from poor families have a higher opportunity cost of going to school than do girls, due to higher expected wages. Furthermore, boys may face greater pressure and incentives to begin work at earlier ages. Boys and girls give different reasons for dropping out of school: girls report that they drop out to care for children and other family members, to enter the labor market, and to get married. Fewer girls than boys report dropping out of school to enter work, although slightly more girls than boys report that they leave school because the cost is too high.

Although education alone is insufficient to lift individuals and households out of poverty, the educated are consistently less likely to be poor. Over the past three decades, Colombia has observed almost continual improvements in school enrollment, number of average years of education completed, and the quality of education available to both urban and rural households. The 1995–99 economic recession muted these improvements, however, and in some cases there has been a slight decline in school enrollment. As real household income has declined, both poor rural and urban households have responded by pulling older children out of school to increase the household labor supply. The adjustment has not been uniform for girls and boys. Indeed, there is evidence that girls' enrollment rates have fallen slightly more than those of boys' over the recession period in both urban and rural areas, while boys' school enrollment rates have risen in rural areas. Despite these changes in enrollment rates, girls have maintained a slight advantage over boys with higher net enrollment, and lower dropout and grade repetition rates.

### *i) Household Structure*

Single female-headed households are disproportionately more likely to be poor in Colombia. Controlling for a variety of factors that affect poverty, female-headed households appear to face an incremental risk of being poor in both urban and rural areas. This tendency is particularly pronounced when the household is rural and the female head is under age 48. In 1999 alone, the likelihood of these families being poor rose by almost 20 percentage points compared with male heads of household of the same age. These same households saw an increment of 5.2 percentage points in the marginal probability of being poor over the recession. Although there has been a net increase in the marginal effect on the probability of urban, female-headed households being poor, this tendency appears to be procyclical. Over the recession period, urban female-headed households saw a slight decrease in the marginal probability of being poor.

---

[20] Completion rates are calculated for individuals age 15 to 19 at each grade. The rate reports the number in this age group who have ever enrolled in school and those who have left school at each grade.

The finding that female-headed households are more likely to be poor is an important one given that these households manifest characteristics that decrease their likelihood of being poor. Female-headed households are typically smaller, contain older-aged heads, and have fewer children under 18 years of age, lower economic dependency rates, higher household employment rates, and higher average levels of education. Female-headed households do, however, consistently report fewer wage earners and a higher number of self-employed and unemployed members. Despite the decline in gender wage gaps, women's wages are consistently lower than men's in all sectors. It is likely, therefore, that (all other things being equal) a household that depends disproportionately on women's wages will be poorer than those dependant on male earnings, even over the recession period.

## IV. Conclusions and Policy Recommendations

Colombia has made significant progress in reducing gender inequalities—and in particular in improving the well-being of women. Girls have higher school enrollment levels than boys, women's fertility and maternal mortality have decreased, women's labor market participation rates have increased, and gender gaps in wages have narrowed. But while the status of women has improved, men's human capital has eroded on the health and education fronts. Boys have worse completion, attainment, dropout, and repetition rates than girls—and these have been exacerbated by the crisis. Males are also more affected by HIV/AIDS-, alcohol-, and drug-consumption-related diseases, and violence, both armed-conflict and crime-related deaths. And men have lost in terms of labor force participation and wages. The Colombia experience also points to the important interlinkages that exist among gender, poverty, and inequality in Colombia. Female-headed households are more likely to be poor and vulnerable than those headed by men. Moreover, mobilizing female labor during periods of recession is an important poverty-reduction strategy, and has cushioned the effects of the crisis. Finally, larger households in Colombia are consistently more likely to be poor and extremely poor.

A number of policy recommendations emerge from this gender analysis. First, gender indicators should continue to be monitored to ensure that gains for women in education, literacy, health, and employment are not eroded by the continuing crisis in Colombia. Girls' enrollment has declined in rural areas (although it continues to be higher than that of boys). And there is evidence to suggest, for example, a new bias toward vaccinating boys.[21] Second, it is clear from the analysis here that the approach to gender needs to be broadened from a conventional focus on women to address the negative dimensions of gender for men. A more holistic approach on gender would contribute to better understanding and thus better response to critical issues in Colombia, such as male crime and violence, and other issues such as boys' education and men's reproductive and sexual health needs. Third, given the immediate needs resulting from the prolonged crisis, it would be important to consider gender in social safety net programs for the poorest and most vulnerable—in particular single-parent female households. Discussion of specific priorities follows.

### *a) Crime and Violence*

Given its human toll and corollary economic consequences, better understanding of the relationship between gender and violence in Colombia is a first priority. Recent research on this subject in other countries has pointed to the link between violence and men's rigid gender roles in society (Barker 1998). Low-income men, in particular, may seek alternate ways to affirm their identity, such as engaging in violence and substance abuse, when they are unable to fulfill their main role of family provider.

According to Morrison and Loreto Biehl (1999), the education system, community-level programs, and the media are important vehicles for addressing and reducing the incidence of violence. For example, the education system has the potential to modify cultural values that promote violent behavior. Possible actions include (a) retraining teachers to ensure they do not promote violent behavior among boys and submission among girls, (b) eliminating gender stereotypes in textbooks and other pedagogical materials, and (c) developing innovative programs to teach children nonviolent resolution skills and promote civic values.

Schools are also an ideal vehicle for identifying at-risk children and families that need special attention. Community-level programs can be used to provide informal education programs, teach citizens about legal sanctions against violence, establish violence-prevention strategies, and provide social services for victims of violence. Finally, the media can be used to promote nonviolence and counteract their own role in reinforcing violence. Mass media education campaigns represent a potentially effective response by providing nonviolent role models and by promoting nonviolent responses. Educational programs to encourage commercial media can produce and disseminate more positive images of interpersonal interactions (male–female and adult–child). Soap operas (*telenovelas*) can be a powerful medium for illustrating nonviolent conflict resolution. In terms of sanctioning domestic violence, important measures include ensuring that men and women are aware of laws and that women have access to legal services.

---

[21] A recent report from PROFAMILIA using the National Demographic Survey found that vaccination rates declined between 1995 and 2000, although boys have a higher vaccination rate than girls (55 percent compared to 49 percent).

In 1998, the office of the presidency launched an important community-based program entitled the *Convivencia y Seguridad Ciudadana,* one of the main objectives of which is to reduce homicides.[22] As part of this program, resources are being dedicated to institutional strengthening of municipalities to enhance their ability to respond to violence, supporting civil society initiatives to promote conflict resolution, reforming judicial and police procedures, extrajudicial conciliation and mediation, and research to look at the multiple causal factors that precipitate and exacerbate violence. Given the linkages between violence and male gender roles, it would be critical for the *Convivencia* program to consider the gender dimension.

### *b) Reproductive and Sexual Health*

Investments in reproductive and sexual health are justified in Colombia given high fertility levels among the poor, the linkage between poverty and household size, the unmet need for contraceptives, the misinformation that exists about contraceptives and sexually transmitted diseases, the health dangers of abortion, and the high incidence of adolescent pregnancy. In addition to directing services at women in union—who are typically the targets of reproductive health programs—programs need to reach youth and men. International experience with youth and men suggests (a) putting in place integrated programs that address employment, violence, sexuality, and STDs and AIDS; (b) using youth workers to reach other youth, and men to reach men; (c) using participatory learning in the form of role playing and assertiveness exercises rather than traditional didactic training methods; (d) addressing causal factors related to adolescent sexual activity, including self-esteem, decisionmaking, gender roles, and values; and (e) targeting youth and men where they normally congregate (for example, schools, the community, the street, the workplace, and so forth, in the case of youth).

### *c) Support to Female Single-Parent Families*

The predominance of families with small children that are below the poverty line and the findings on increased vulnerabilities of female single-parent households imply that targeting these groups would go a long way in reducing poverty, and might be at the center of a poverty-reduction strategy. Specific recommendations include increasing poor women's access to childcare[23] and family planning, continuing improvements in education, and reducing barriers to poor women's participation in the labor market.

---

[22] This initiative receives financing from the Inter-American Development Bank.

[23] According to the *World Bank Poverty Report,* childcare programs were one of the areas neglected by public policies during the 1990s. Between 1992 and 1997 the number of available spaces in childcare centers shrank by 4 percent, and coverage fell by as much as 7 percentage points. Childcare services in Colombia have the highest unmet demand for coverage as defined by the relative access gap (Vélez and Foster, forthcoming).

## References

AVSC (Association for Voluntary Surgical Contraception) INTERNATIONAL. 1997. "Profamilia's Clinics for Men: A Case Study." New York.

______. 1998. "Male Participation in Sexual and Reproductive Health: New Paradigms." Symposium Report, October 10–14. Oaxaca, Mexico, AVSC International and International Planned Parenthood Federation.

Barker, Gary. 1998. "Boys in the Hood, Boys in the Barrio: Exploratory Research on Masculinity, Fatherhood and Attitudes Towards Women Among Low Income Young Women in Chicago, USA and Rio de Janeiro, Brazil." Presented at an International Union for the Scientific Study of Population/Centro de Estudios de Población Seminar on Men, Family Formation and Reproduction, May 13–15, Buenos Aires, Argentina.

CEDAW (United Nations Committee on the Elimination of Discrimination Against Women). 1997. *Consideration of Reports Submitted by States Parties Under Article 18 of the Convention on the Elimination of All Forms of Discrimination Against Women: Fourth Periodic Reports of States Parties—Colombia, 1997.* New York. Available online at: http://www.un.org/womenwatch/daw/cedaw/Colombia99.htm.

CEPAL (Comision Económica para América Latina y el Caribe). 1999. *Panorama Social de America Latina, 1998–1999.* Santiago de Chile.

______. 2000a. *Aspectos Económicos de la Equidad de Género.* Documento de Referencia para la Séptima Conferencia Regional Sobre la Mujer de América Latina y el Caribe. Lima, Peru, 8–10 de Febrero.

______. 2000b. *Panorama Social de America Latina, 1999–2000.* Santiago de Chile.

Correia, Maria C. 2001. "Gender and Hurricane Mitch." World Bank Poverty Reduction and Economic Management (PREM) Note 57. August.

CRLP/CASA. (Center for Reproductive Law and Policy/Corporación Casa de la Mujer). 1998. *Women's Reproductive Rights in Colombia: A Shadow Report.* Compiled for the Twentieth Session of the Committee on the Elimination of All Forms of Discrimination Against Women. New York.

Deere, C. D., and M. León. 2000. *Gender, Property and Empowerment: Land, State and Market in Latin America.* Bogotá: Tercer Mundo, Programa de Estudios de Género, Mujer y Desarrollo, Universidad Nacional de Colombia.

DHS (Demographic and Health Surveys). 1995. "Demographic and Health Survey for Colombia." Calverton, MD: DHS.

DNP (Departamento Nacional de Planeación). 2001. "Sistema de Indicadores Sociodemográficos para Colombia." Bogotá. Available online at http://www.dnp.gov.co/.

Filmer, Deon. 1999. "The Structure of Social Disparities in Education: Gender and Wealth." Washington D.C.: World Bank.

FNUAP (Fondo de Poblacion de las Naciones Unidas). 1995. *Colombia: Revision del Programa e Informe del Desarrollo de Estrategias.* New York.

Gaviria, Alejandro. 2001. "Who Bears the Burden of Crime and Violence in Colombia?" In *Colombia Poverty Report*, Vol. II. Washington, D.C.: World Bank (Colombia Country Management Unit, Poverty Reduction an Economic Management Sector Management Unit, Latin America and the Caribbean Region).

IADB (Inter-American Development Bank). 1999. "Facing up to Inequality in Latin America: Economic and Social Progress in Latin America 1998–1999." Washington, D.C.

Jaramillo, Carlos Felipe. 1998. "Liberalization, Crisis and Change in Colombian Agriculture." Boulder, CO: Westview Press.

Morrison, A. R., and M. L. Biehl, eds. 1999. "Too Close to Home: Domestic Violence in the Americas." Washington D.C.: Inter-American Development Bank.

Moser, Caroline, and Cathy McIlwaine. 1999. "Gender and Rebuilding Social Capital in the Context of Political Violence: A Case Study of Colombia and Guatemala." Presented at the World Bank's *Conference on Gender, Armed Conflict and Political Violence*. Washington D.C., June 10–11.

Ospina, Rosa Inés. 1998. "Mujeres Rurales en la Agenda del Estado." In *Género, Equidad y Desarrollo*. Bogotá: Departamento Nacional de Planeacíon, TM Editores.

PAHO (Pan American Health Organization). 1999a. "Research in Public Health Technical Papers." Washington D.C. Available online at http://www.paho.org/English/HDP/HDR/hdr-serie.htm.

______. 1999b. *Health in the Americas: 1998 Edition*. Vol. II. Washington, D.C.

Pollack, W. 1998. *Real Boys. Rescuing Our Sons from the Myths of Boyhood.* New York: Henry Holt and Company, Inc.

PROFAMILIA and Macro International, Inc. 1995. *Encuesta Nacional de Demografía y Salud 1995.* Bogotá: PROFAMILIA, and Calverton, MD: Macro International.

Richani, Nazih. 1997. "The Political Economy of Violence: The War System in Colombia." *Journal of Interamerican Studies and World Affairs* (U.S.), 39:37–81.

UNAIDS (Joint United Nations Programme on HIV/AIDS). 2002. *Report on the Global HIV/AIDS Epidemic: June, 2000.* (UNAIDS Database). New York, N.Y. Available online at: http://www.unaids.org/epidemic_update/report/Final_Table_Eng_Xcel.xls.

United States Census Bureau. 2002. *International Database (IDB).* Washington, D.C.: Available online at: http://www.census.gov/ipc/www/idbnew.html.

UNSO (United Nations Statistical Office). 1970, 1975, 1977, and 1999. *Demographic Yearbooks.* New York: United Nations.

Vélez, C. E., and V. Foster. 2001. "Public Social Expenditure in Colombia: Incidence and Sector Priorities in the 1990s." Washington, D.C.: World Bank.

Vélez, Carlos Eduardo, Bénédicte de la Brière, and Natalia Millán. 2001. "Poverty and Welfare in Rural Colombia During the Last Two Decades." In *Colombia Poverty Report*, Vol. II. Washington, D.C.: World Bank (Colombia Country Management Unit, Poverty Reduction and Economic Management Sector Management Unit, Latin America and the Caribbean Region).

Vélez, Carlos Eduardo, Mauricio Santamaria, Natalia Millán, and Bénédicte de la Brière. 2001. "Two Decades of Economic and Social Development in Urban Colombia: A Mixed Outcome." In *Colombia Poverty Report*, Vol. II. Washington, D.C.: World Bank (Colombia Country Management Unit, Poverty Reduction and Economic Management Sector Management Unit, Latin America and the Caribbean Region).

World Bank. 1999a. "Violence in Colombia: Building Sustainable Peace and Social Capital." Report No. 18652-CO. Washington, D.C.

______. 1999b. "The Importance of Family and Community Social Capital in the Creation of Human Capital in Urban Colombia." Background Paper for the Colombia Youth Development Project (Draft). Washington D.C.

______. 2001. *Colombia Poverty Assessment Report*. Colombia Country Management Unit, Poverty Reduction and Economic Management Sector Management Unit, Latin America and the Caribbean Region. Washington D.C.

______. Forthcoming. *Colombia Poverty Report*, Vol. II. Colombia Country Management Unit, Poverty Reduction and Economic Management Sector Management Unit, Latin America and the Caribbean Region. Washington, D.C.

WDI. 1999, 2001. *World Development Indicators (CD-ROM)*. Washington D.C.: World Bank.

# 28

# Indigenous Peoples and Afro-Colombian Communities

*This Chapter was written by Shelton Davis and Enrique Sanchez with the assistance of Maria Valdes.*

Colombia is a rich and complex country not only in terms of its biological diversity, but also because of its diverse population. This diversity places the country in a privileged position compared to the rest of the world. Colombia covers an extensive territory of 1,141,748 square kilometers and has a population of approximately 43 million. Within this population there are nearly 800,000 indigenous Colombians who belong to 82 different ethnic groups, and just over 1 million Afro-Colombians that live in small traditional communities all along the Pacific and Caribbean coasts. The country's status as a multiethnic nation is fully recognized in the Constitution, which contains a body of law that supports and promotes the development of the fundamental economic and social rights of these ethnic groups. This Constitution is an example for other multiethnic nations. Colombia's progress in the area of the recognition of territorial rights of indigenous and Afro-Colombian peoples is practically unparalleled in the Americas (see Annex I).

Despite these advances, problems persist that affect the lives of the indigenous and Afro-Colombian peoples and their access to development. Institutions should pay special attention to these problems because of the social and cultural specifics of these ethnic groups, and in order to comply with the special rights and laws that guarantee their existence.

This Chapter describes the situation of ethnic groups in Colombia and the main problems they face, and presents recommendations that the new government could implement as possible solutions. The Chapter is divided into three parts: (a) a discussion of Colombia's status as a pluriethnic and multicultural nation; (b) an evaluation of the rights of ethnic groups in the context of the political conflict and economic crisis; and (c) a series of recommendations regarding the role of indigenous communities in the peace process, respect for social and economic rights, the protection of their traditional territories, and conservation of natural resources.

## I. Colombia: A Pluriethnic and Multicultural Nation

### *a) The Indigenous Population*

Colombia's indigenous population is estimated at 785,356,[1] representing 1.8 percent of the country's total population. This population is distributed among 82 ethnic groups. The data show that indigenous Colombians have experienced a demographic recovery, although with an unequal regional distribution. The map of indigenous territories presents two different realities: large ethnic territories on one hand, and dispersed communities living on small extensions of land on the other (see Annex II).

In 1998 Piñeros and Ruiz studied the demographic behavior of indigenous communities in four large regions of the country: Amazon, Andean, Caribbean, and Tierradentro. They found the following: (a) 45 percent of the indigenous population in these regions was under age 15; (b) the gross birth rate was 41 births for each 1,000 inhabitants, or above the national birth rate which was 26.97; (c) life expectancy was 57.8 for women and 55.4 for men, lower than the national average life expectancy that same year, which was 73.04 for women and 64.27 for men (see Annex Table III.1).

The indigenous population is of particular importance in the jungle biomes and natural savannahs of the Amazonia and the Orinoquia, and on the Guajira peninsula and in the northeast of the Cauca department. The urbanization processes are under way, and there is a real threat that indigenous peoples from south of the Andes may migrate toward the Amazonian foothills (Putumayo) because of cultural change, the exhaustion of indigenous communal lands (*resguardos*) in the Andean zone, and the forced displacement of families and communities provoked by the armed internal conflict.

While household surveys do not contain data on salaries and poverty levels of indigenous peoples, the information that does exist on health, education, and other social indicators shows a much lower quality of life than for the general population. One of the main problems in evaluating the social and economic welfare of indigenous communities is their geographic isolation and the fact that they are not included in official statistics on poverty. In addition, many of these indigenous communities rely on their own natural resources for subsistence and development rather than a monetary salary. (See Section II of this Chapter and the Chapters on Health and Education and social indicators of the population in general.)

### *b) The Afro-Colombian Population*

There is little precise information on the size of the Afro-Colombian population, although it is large. The Commission for the formulation of a National Plan for the

---

[1] Projection of data from the National Department of Statistics census/1993 (Department of National Planning 2002).

Development of the Afro-Colombian Population estimates this population at 10.5 million.[2] Within the Afro-Colombian population, approximately 1.2 million still live traditionally; the majority of this group belong to communities in the Pacific region and from the Caribbean region in southern Bolivia.

Currently, the Afro-Colombian population is experiencing an acceleration of the migration process to urban centers. This migratory movement can be partly explained by cultural changes and by the high incidence of forced displacement caused by the armed internal conflict (Urabá, low and medium Atrato) and violent processes associated with the expansion of the cultivation of illicit crops (Patía and Naya Rivers). The information within the National Plan for the Development of the Afro-Colombian Population indicates a situation of extreme poverty and lack of access to basic social services (see Box 1).

### *c) Progress in Recognition of the Rights of Ethnic Groups*

There is a strong historic tradition in Colombia of recognizing the rights of indigenous peoples. Through a long, historic process of demanding their rights, indigenous communities have forced the State to accept and protect their territorial rights. The State has also had to recognize the inalienable rights of indigenous peoples to their collective lands and to organize their own forms of government.

The Constitution of 1991 raised these rights to a constitutional level and extended their coverage to other sectors of the population that maintain their own forms of living, and social and cultural institutions that differ from the rest of the national society. The Constitution defined indigenous peoples and communities (Amerindians) as "ethnic groups," and also gave this status to Afro-Colombian communities (black communities) and the inhabitants of the islands of San Andrés and Providencia, traditionally known as *raizales*. This same recognition recently was also legally extended to the Roma population, commonly known as "gypsies."

Colombia ratified International Labour Organization (ILO) Conventions 107 (1957) and 169 (1989) on Indigenous and Tribal Peoples and has applied these treaties in a systematic manner to develop legal instruments for the protection of the rights of peoples and communities. Based on these agreements, the country launched a successful program to survey and legally recognize the boundaries of the ancestral communal properties of indigenous communities. This land program, a pioneer in America and the world, is still under way and has existed since the Agrarian Reform Law came into effect in 1961. The country has also made important regulatory headway for ethnic groups in the areas of health, education, and political participation.

---

[2] This number comes from applying an arbitrary percentage to the 1993 census results from the municipalities where the descendants of African communities were supposed to be living (DNP/Pacific Plan 1999).

**Box 1. National Development Plan for the Afro-Colombian Population: Building a Pluriethnic Nation: Poverty and Human Development Indicators 1998–2002**

"The average per capita income of the Afro-Colombian population varies between 500 and 600 dollars annually, while the national average income is 1,500 dollars. Approximately 74 percent of the Afro-Colombian population is paid less than minimum wage. Life expectancy is lower than the national average, between 10 and 30."

"Illiteracy runs at 43 percent among the Afro-Colombian rural population in rural areas, and at 20 percent in urban areas. On a national level, illiteracy rates are 23.4 percent in rural areas and 7.3 percent in urban areas. Coverage of primary education is 60 percent for the urban Afro-Colombian population and 41 percent in rural areas, while the national averages are 87 percent and 73 percent, respectively. Secondary education coverage is 38 percent, and this is exclusively in urban centers. In the Andean region this same coverage is 88 percent."

"For every 100 young blacks that finish high school in the Pacific region, only two go on to a university; 95 percent of the families cannot send their children to college because they lack the resources. Secondary education in this region is inferior as compared to the rest of the country at a rate of 40 percent."

"The health situation fits within the context of a low socio-economic status of generalized poverty, low quality of life and high NBI. The national epidemiological situation of black communities nationally is characterized by high morbidity and mortality rates, and the prevalence of infectious diseases such as EDA, IRA and tuberculosis. The infant mortality rate is 10–50 percent higher than the national average in regions where the Afro-Colombian population is highly concentrated."

"Access to health services in Afro-Colombian communities is limited and with lower indicators than for the rest of the Colombian population due to the

## II. The Rights of Ethnic Groups in the Context of the Political Conflict and Economic Crisis

### *a) Surveying and Consolidating the Territorial Rights of Ethnic Groups*

### i. Recognition and Surveying of Indigenous Homelands

Nearly all indigenous Colombians live in collective territories legally known as *resguardos* (indigenous homelands). In accordance with the law, these areas are a legal

**Box 1. (continued)**

lack of coverage and low quality of health services. This is also linked to the lack of adequate health promotion and prevention, and lack of well-trained human resources."

"In comparison to the rest of the Colombian population, in areas of high concentration of black Colombians, fewer people participate in and benefit from the general social security system."

"As regards health management, municipalities with a sizable Afro-Colombian population have very low certification levels. In the Pacific Coast, for example, only three of 42 municipalities in the region are certified, and in the Caribbean only 61 of 183 municipalities are certified."

"The Afro-Colombian population is not included in the institutional provision of health services in Colombia in terms of information systems for planning, epidemiological monitoring systems, nor within the General Social Security System. There is no administrative apparatus to channel health services to the Afro-Colombian population."

"The basic sanitation facilities in Afro-Colombian communities show the differentiated situation as compared to the rest of the country. Indicators for coverage and quality of aqueducts, sewerage and disposal of solid and liquid wastes show a deficit that is evident in the case of the Pacific where only 43 percent of the houses in the municipal capital are covered by aqueducts, and only 20 percent have sewerage. The numbers drop to 5 percent coverage in rural areas. In the Pacific region only 19 percent of the houses have access to these three basic services while in Colombia the average national coverage is 62 percent. Coverage on the Caribbean coast for aqueducts and sewerage is 69 percent and 37.7 percent on average, compared to 79 percent and 63 percent respectively at a national level."

and sociopolitical institution made up of one or more indigenous communities that hold a collective deed, are backed up by the guarantee of private property rights, and are internally governed by an autonomous organization—a council—with its own regulatory system. According to articles 63 and 329 of the Constitution, these *resguardos* are inalienable and nonprescriptible (that is, the title to these lands cannot be acquired merely through uninterrupted possession of specific duration) (Article 21 of Law 160, 1994).

Currently, these legally recognized and surveyed territories are on extensions of land that are communally owned, covering an extension of 308,161 square kilometers, or nearly 27 percent of the national territory (see Annex II tables). Where the homelands do not have enough territory, land has been acquired through agrarian laws permitting the acquisition of land for indigenous peoples. Table 1 presents the territorial situation of indigenous peoples.

Table 2 presents the legal situation of indigenous land tenure today in Colombia and compares the legal situation of indigenous land tenure in Colombia in 1980 and 2001.

The protected areas present the following problems:

- Imprecise surveying and property lines. The surveying processes of some of the homelands suffered from technical and cartographic limitations.
- Illegal occupation by either colonizers or nonindigenous Colombians. Although INCORA's policies are oriented toward avoiding the inclusion of land plots occupied by colonizers, the reality is that at the moment when a homeland is legally constituted, some of these areas have already been occupied by colonizers—individuals who depend economically on the illegal extraction of natural resources, and also sometimes by cultivators of illicit crops (coca).
- Difficulties and delays with the compensation and resettlement process of rural Colombians already living on lands within indigenous homelands. Some colonizers or occupiers who are not indigenous have been affected by the setting up of some indigenous homelands, because they

**Table 1. Legal Situation of Indigenous Land Tenure in Colombia, December 2001**

| *Types of Land Tenure of Indigenous Peoples* | *Number Homelands* | *Area (hectares)* | *Percent Area* | *Population* | *Percent Population* |
|---|---|---|---|---|---|
| Indigenous homelands—historic-colonial period | 55 | 405,743 | 1.32 | 171,201 | 21.80 |
| Homelands—new—created by INCORA* | 583 | 30,410,409 | 98.59 | 511,303 | 65.10 |
| Indigenous reserves | ** | 5,115 | 0.02 | 1,000 | 0.13 |
| Without a legally defined territory | N.D | N.D | | 29,863 | 3.80 |
| Communities or rural land parcels*** | N.D | 23,964 | 0.08 | 71,989 | 9.17 |
| **Totals** | **638** | **30,845,231** | **100.00** | **785,356** | **100.00** |

N.D. = Not determined.

* Includes homelands dating from the colonial period that were restructured and extended by the *Instituto Nacional de Colonización y Reforma Agraria* (INCORA) with land purchased from private owners.

** A reserve that should legally become a recognized homeland.

*** Includes property owners and individual landholders.

*Source:* DNP–DDT Arango and Sánchez (1998). Based on information from National Department of Statistics, updated through 2001 with data from INCORA.

**Table 2. Comparison of the Legal Situation of Indigenous Land Tenure in Colombia Between 1980 and 2001**

| | *Type of Land Tenure* | *Percent of Indigenous Population* | | |
|---|---|---|---|---|
| *Category* | *1980* | *2001* | *1980* | *2001* |
| 1 | Colonial or historic homeland | Colonial or historic homeland | 36.00 | 21.80 |
| 2 | * | New homelands from 1961 on | 0 | 65.10 |
| 3 | Indigenous Reserves | Indigenous Reserves | 9.0 | .13 |
| | Homelands in process of legalization | ** | 21.00 | 0 |
| 4 | Civil indigenous communities | Rural land parcels, individual landholders | 5.0 | 9.17 |
| | Individual landholders | Individual landholders | 7.0 | N.D. |
| 5 | Indigenous people without a defined territory | Occupants without a defined territory | 22.00 | 3.80 |

* Resguardos were not created prior to 1980 as part of the agrarian reform process.

** In 1980 the creation of homelands was halted and the process of creating new homelands was begun with the change of legal regime from reserve to homeland.

*Source:* Arango and Sánchez (1998), Annex 1 for 2001

are living on lands within the territories under communal deed. The State has the obligation to compensate these legal occupants by purchasing the lands they have worked on. In addition to the costs entailed in this reparation process, the visits, evaluations, and procedures are usually bureaucratic, and there is no resettlement policy for dealing with this particular group of people. In some cases, the indigenous communities themselves have decided to find ways to live alongside legal occupants, so that their nonindigenous neighbors do not have to suffer displacement.

- DIFFICULTIES WITH THE GOVERNANCE OF VERY LARGE INDIGENOUS HOMELANDS. Homelands with large extensions of land are usually difficult to manage. The following problems merit mentioning: (a) the difficulty of forming a general authoritative body that manages the area where diverse ethnic groups live; (b) the difficulties that indigenous peoples encounter in terms of watching over and protecting their own territories. The inability to do this leads to the illegal extraction of natural resources by individuals or companies involved in logging, fishing, and mining; (c) disorganized and incoherent intervention by diverse territorial entities that have jurisdiction in the homeland; (d) the overlapping with protected areas pertaining to the National System of Natural Parks; (e) the presence of insurgent groups that take refuge in indigenous territories and use the population as a human shield; and (f) the location of these homelands in two or more departments and municipalities, which makes them more difficult to administer.

Finally, it is important to mention that there is still a small sector of the indigenous population that has not been able to legalize their territories. These are indigenous communities where the land titling process is more difficult because they live alongside other rural farming communities or other ethnic groups, or they do not have sufficient land and their access for acquisition is limited. The land situation is critical in the following departments: Putumayo (Páez and Awa from the Andean zone), Tolima, and Nariño, where indigenous Colombians are living on tiny plots of land that are not big enough for subsistence and the land is of poor quality.

### ii. Demarcation and the Collective Titling Process of the Afro-Colombian Communities

The Afro-Colombian communities have begun living within a regime similar to that of indigenous Colombians, as extensions of land are provided with collective titles. This process began when the 1991 Constitution entered into effect, and was furthered by Law 70 in 1993, and the process has advanced considerably since then. Between 1996 and 2002, through INCORA, the national government surveyed and provided titles for 64 collective territories of Afro-Colombian communities covering an area of 2,695,475.487 hectares. This benefited 27,338 families in the Antioquía, Cauca, Chocó, and Nariño departments. This titling process ran into difficulties because of the lack of new resources and pressure from armed illegal groups. These groups have blocked the titling process or forced out the communities in these territories, causing their displacement.

## *b) Natural Resources*

### i. Policies and Environmental Agreement

Colombia has made important progress in terms of decentralization and linking communities to conservation activities. The Ministry of the Environment launched the Environmental Collective Project, which involves a new type of environmental consensus building and planning. As a part of this project, policies were formulated in a holistic manner dealing with territorial organization, adequate management, and the recovery of ecosystems associated with water, conservation, and the restoration of important ecosystems for their biodiversity, sustainability of endogenous productive processes, and the supply of environmental services (green markets). Two important environmental agendas were formulated during the development of this model: the Pacific Agenda and Amazonia XXI. Despite this progress in terms of environmental policy, these agendas still have not been implemented due both to the weakness of the entities in charge of their coordination and implementation, and to the fiscal limitations of this sector.

The Ministry also has a technical proposal for a National Biodiversity Action Plan that was formulated along with indigenous organizations, Afro-Colombian groups, and environmental groups. This plan has not been implemented. Some analysts believe that these types of policies and the proposals within the Action Plan should be continued during future administrations, and should be revised, adjusted, and above all made operational at all levels of the National Environmental System (SINA).

### ii. The Overlap of Environmentally Protected Areas and Territories within Indigenous Homelands and the Collective Territories of Afro-Colombian Communities.

Of the 45 protected areas that make up the National System of Natural Parks,[3] 19 indigenous homelands and one indigenous reserve overlap with these areas. This is the case for the Macuira and Puinawai National Parks. There are also indigenous homelands that overlap between 80 and 100 percent with natural parks. The following indigenous homelands are in this situation: Quebrada Cañaveral–San Jorge River that overlaps with the Paramillo Park in Córdoba; the Motilón–Barí homeland

**Table 3. Natural Parks that Overlap with Indigenous Territories**

| *Natural Protected Area* | *Indigenous Homeland* | *Location* |
|---|---|---|
| Paramillo | Esmeralda, Reserva Río Verde, Quebrada Cañaveral | Antioquía and Córdoba |
| Cahuinarí | Predio Putumayo | Amazonas |
| Amacayacu | Cothué, Mocagua, Puerto Nariño | Amazonas |
| El Cocuy | Cobaría-Tegría-Bócota | Boyacá |
| Puracé | Puracé and Coconuco | Cauca |
| Nevado del Huila | Huila Indigenous Homeland | Cauca |
| Sierra Nevada | Kogui-Malayo and Arhuaco | Magdalena, Cesar, and Guajira |
| Ensenada Utría | Valle-Boroboro, Juribidá | Chocó |
| Macuira | Carraipía Reserve | La Guajira |
| La Paya | Jirijiri, El Tablero, El Hacha, Lagarto Cocha | Putumayo |
| Puinave | Cuenca Media and Alta del Guainía, Alto Río Guainía, Cuiarí and Isana | Guainía |
| Nukak | Nukak | Guaviare/Vaupés |

*Source:* DNP–UDT. Based on data on the indigenous territorial regime, 1995.

---

[3] The formation of a National Park System became a reality when the *Instituto Nacional de Recursos Naturales Renovables y Medio Ambiente* (National Institute of Natural Renewable Resources and Environment, INDERENA) was established in 1968 to create, administer, and manage natural protected areas. In 1974, through Decree Law 2811, the Environmental Protection Code for Natural Renewable Resources was put into effect. The name "National Park System" was given to all areas of exceptional value to national patrimony as areas of conservation and special protection because of their benefits to all inhabitants of the nation, particularly because of their natural, historical, and cultural characteristics.

which overlaps with the Catatumbo–Barí Park in northern Santander, and the Kogui–Malayo–Arhuaco territories that overlap with the Sierra Nevada de Santa Marta National Park.

The Colombian government believes that the existence of areas set aside as natural parks and indigenous homelands are compatible and similar since both legal regimes contribute to the conservation and protection of the nation's natural patrimony.[4] Some legal experts believe that the 1991 Constitution, which recognized the homelands and parks as "inalienable," set up a legal contradiction that should be resolved by keeping in mind the need to preserve the nation's natural patrimony and the preeminence of the territorial rights of ethnic groups—the underlying support for other collective rights. The government is aware of the need to create regulations that reconcile conservation needs with the need to protect the most basic rights of ethnic groups. It should not be forgotten that indigenous Colombians want to directly manage the parks that overlap with their territories. In the Declaration of Puerto Remanso del Tigre Amazon of April 1989, this was the position of the indigenous peoples of the Mirití and Caquetá Rivers. It was also one of the conclusions reached and stated within the Declaration of Santa Marta of the First Latin American Congress on Parks and Protected Areas in May 1997.

### *c) Territorial Pressure on the Indigenous Homelands and Collective Territories of the Afro-Colombian Communities*

#### **i. Colonization Processes**

Colonization processes in indigenous and Afro-Colombian territories have historically reduced the vital living space of these peoples and communities. This is the case of the Cofán, Siona, and the Koregüaje peoples and the communities that are the descendants of Africans from the Pasto–Tumaco route in the department of Nariño. The intensity of colonization seems to have slowed down with the collective titling process under way. However, there are some frontiers between homelands and collective territories, and sectors of colonizing farmers that are putting pressure on the resources of these territories even more than on the communal lands themselves. The most troubling phenomenon with respect to colonization processes is colonizers who live off the cultivation of illicit crops. In the future there may be the problem of the possible initiation of new colonization processes because of the clearing of roads that will cross through the territories of ethnic groups.

Some sectors of Colombian society also believe that indigenous peoples have access to too much land, and that they are not adequately exploiting these lands in economic terms. Those with this viewpoint do not realize that (a) the creation of indigenous homelands is because of the recognition of the ancestral and historic rights of indigenous peoples as descendants of the first inhabitants of the nation and their right to exercise these rights; (b) that the territories covered by jungle and natural savannahs contain fragile ecosystems that are limited in terms of agricultural exploitation and traditional fishing, and that their potential lies in the proper conservation and sustainable use of their biodiversity; and (c), that the economies of ethnic groups are based on another rationale and that these communities have other ways of relating to the environment and of using natural resources. Their economies depend directly on the environmental supply and, as a consequence, on the conservation of wilderness ecosystems.

---

[4] Article 7 of Decree 622 of 1977 was meant to address this issue, and established that there is no incompatibility between creating a park and an indigenous territory set aside as a reserve.

### ii. Illicit Crops

Some indigenous and Afro-Colombian territories have suffered forced occupation or have been the scene of transactions by nonindigenous occupants. These occupants plant illicit crops in the territories in order to avoid State repression. In 1999 Carlos Cesar Perafán estimated that 17 percent of the country's illicit crops were being cultivated within indigenous territories. Some communities have adopted these crops, but the majority reject them because they consider their current use to be contrary to their traditional beliefs—because in many cultures the coca plant is used in rituals for sacred purposes. These illicit crops have had a negative impact on the indigenous communities of Putumayo, and on Afro-Colombians of the Patía River in the department of Nariño.

### iii. The Impact of the Armed Internal Conflict on Communities and Indigenous and Afro-Colombian Families

Indigenous and Afro-Colombian territories have been drawn into the armed internal conflict because of their strategic location or because the homelands and communal lands are located in isolated areas that permit armed illegal groups to take refuge within them. These groups also use them as a rearguard or retreat zone, and use ethnic territories and their inhabitants as a human shield to avoid punitive action by the armed forces. For example, the *resguardo* belonging to some communities of the Páez People (Naza) settled along the Caquetá River, and their lands were occupied by irregular armed groups that displaced the titleholders from their lands. Many indigenous and Afro-Colombian leaders who have defended the autonomy of their communities have been persecuted, displaced, disappeared, and murdered.

Other consequences of the armed conflict are (a) the intervention of armed groups in community life has fomented conflicts and internal divisions that break down community ties; (b) the armed actors are an obstacle to the functioning of the internal governments of the communities because they often end up substituting for the internal government by making decisions for traditional authorities and taking justice into their own hands; (c) the disintegration of social networks, particularly of families, because of the forced recruitment of young indigenous men and women by these groups or of persons forced to serve as their guides; (d) the abandonment of farmland resulting in the disturbance of economic life and traditional forms of work, and either temporary or definitive forced displacement, which creates very serious economic, social, and cultural trauma; and (e) the a lack of security in these territories because of the cultivation of illicit crops and the illegal exploitation of natural and mineral resources.

The communities belonging to ethnic groups have assumed a position of neutrality toward the armed conflict, but this neutrality has not been respected. The Peace Communities, like those in Urabá, have been seriously threatened by this conflict, as have indigenous communities within the Indigenous Organization of Antioquía.

### iv. Ethnic Groups Displaced by the Armed Internal Conflict and Their Return

In 2000, of the 53,280 people whose ethnic origins were known, 18 percent belonged to the Afro-Colombian population and 3 percent to the indigenous population. The territorial disputes between illegal armed groups has generated an Afro-Colombian and indigenous peoples diaspora[5] in the lower Atrato region, on the Naya River, and these groups present a threat to very fragile Afro-Colombian communities such as those along the Mira and Patía Rivers, and to indigenous peoples such as the Chami and Embera del Sinú, among others. Some analysts believe that in addition to the armed conflict (and associated with it), two other factors that generate violent situations are the concentration of rural property and the expansion of pasture for extensive cattle ranching—a phenomenon known as *neolatifundio*—which is caused by the proliferation of an illegal economy.

Presidential Decree 1396 of 8 August 1996, which created the Human Rights Committee of Indigenous Peoples, has not been made operational. Numerous indigenous communities are struggling to gain respect for their cultures, territories, and independence as they face armed actors in their areas. There are recent examples of peaceful resistance in which the communities were able to dissuade the violent actors from attacking the civilian population and destroying community infrastructure, and the actors left the communal lands. However, these communities do not have real protection. There has been an increase in the number of displaced indigenous communities in recent years because government measures are insufficient and ineffective. A similar phenomenon is occurring among the Afro-Colombian population.[6]

---

[5] The Report of the High Commissioner for Human Rights of 1999 noted that "many indigenous and Afro-Colombian leaders have been killed or disappeared, and a large number of people from these communities have been forced to move. Armed actors are exercising an alarming level of pressure on the Embera–Catío people in the regions of the high Sinú (Córdoba) and in Juradó (Chocó), on the Uwa people in northern Boyacá, and on Afro-Colombian communities in the Urabá chocoano, the lower and medium Atrato (Chocó), los Montes de María and southern Bolívar...." (2000:21)

### v. The State's Role in the Protection of Human Rights of Indigenous and Afro-Colombian Communities

Colombia has made prodigious efforts to protect the basic human rights of ethnic groups, but these efforts often are not enough given the dimension of the problem. The Permanent Roundtable on Human Rights has not held regular meetings, and its work has not been efficient. Some believe this is due to the weakness of the coordinating entity and the lack of operational mechanisms. The Solidarity Network has advanced in carrying out a participatory diagnostic study on the problem of forced displacement, but has not been able to create a specific strategy for ethnic groups through the National System for the Displaced Population. There have also been complaints about the inefficiency and delays in the investigation of kidnappings and forced disappearances of indigenous leaders. Many fear that these crimes will not be solved, and impunity will reign due to the weakness of training processes.

### vi. Deterioration of the Socioeconomic Conditions of Indigenous and Afro-Colombian Communities

There is a structural type of poverty associated with the disadvantageous forms in which local and community economies are linked with the major commercial circuits. These circuits are extractive and the terms of exchange for their products are unequal. Poverty factors are also associated with a historical deficit of public attention to the basic needs of communities belonging to ethnic groups. Public services, particularly those relating to environmental health, health in general, education, and support services for production are usually deficient in ethnic territories.

When studying quality-of-life indicators by region, an accentuated deterioration in life conditions for ethnic groups is easily observed. The situation of Afro-Colombian communities in the Pacific region is particularly serious, with the lowest quality-of-life indicators in the entire country. Income per capita is less than US$500; 80 percent of the population cannot meet their basic needs compared with 32.2 percent nationally. Absolute poverty runs at 60 percent, and adult illiteracy hit 37 percent compared to 9 percent nationally. Health coverage did not reach even 30 percent,[7] and the infant mortality rate is one of the highest in Latin America, with more than 100 deaths for each 1,000 live births.[8]

---

[6] In February 1997, when six communities from the Riosucio municipality solicited their collective titles to their lands—the first to be handed out in the Pacific within the framework of Law 70 of 1993—the entire population was forced to abandon their territory due to the pressure of armed groups operating outside the law (paramilitaries) and that were fighting the guerrillas.

[7] In 1998 there were 1.6 doctors for each 10,000 inhabitants.

[8] IDB Program–Pacific Plan 1998/BioPacific 1998.

186

### vii. Effects of the Economic Crisis on Indigenous and Afro-Colombian Communities

Families, indigenous communities, and Afro-Colombian rural communities still live in accordance with their own culture and with economic practices that are different from the rest of the society. However, they are becoming increasingly dependent for their subsistence needs on inputs and goods from modern life, and they need monetary income to purchase them. The productive systems of ethnic groups are very vulnerable, and they have been greatly affected in recent years by the limitations they face in participating in markets, by the migration of adults to populated areas because of forced displacement and, in some regions, because of the abandonment of traditional agriculture caused by the cultivation of illicit crops.

These traditional economies are now in a very precarious position because of the crisis of the extractive system (wood, gold, fishing), from which they made their income in the past and the lack of opportunities in production and marketing. These agricultural, forestry, and mining products have little aggregate value, and these groups do not have access to sustainable alternative technologies on a large scale, or to secure niche markets that would allow them to overcome the limitations imposed by an extractive economy. The privatization scheme of productive services for the agrarian sector, while beneficial to the private sector, tends to negatively affect traditional communities. Today indigenous and Afro-Colombian organizations complain about the lack of efficient, adequate, and flexible systems to support production, and to preserve and promote sustainable use of natural patrimony. Such systems would allow communities to perform better in the marketplace, add value to their products, and boost income levels.

### viii. Response to Programs to Substitute Illicit Crops and Fumigation

In various forums, indigenous and Afro-Colombian communities have spoken out against the expansion of illicit crops within their territories, but they are also against inadequate eradication methods that can harm life, social organization, culture, and the environment. These groups have come up with important initiatives to manually substitute illicit crops through negotiated agreements. Currently, a substitution project resulting from a mutual agreement between the national government and indigenous organizations (Indigenous Zonal Organization of Putumayo) is under way in the Putumayo región, the part of the country most affected by this problem. This project seeks to eradicate illicit crops through voluntary participation.[9] This initiative, which covers 108 communities and 4,300 families and is supported by the Alternative Development Plan (PLANTE), seeks to generate processes of community organization, education, production, and training in order to build and strengthen another type of productive base that does not involve cultivation of illicit crops.

---

[9] This mutual agreement to substitute illicit coca crops in the Putumayo department is known as the "Integral Root by Root Plan for the Survival of Indigenous Peoples."

### ix. Deteriorating Health Conditions

There is a general lack of information among ethnic groups about the General Social Security System, and gaps exist in its application to the health of these groups. The territorial entities do not have the technical or institutional capacity to comply with their obligations in terms of providing health services to indigenous peoples and Afro-Colombians. There is no epidemiological profile of indigenous communities, and health professionals have problems understanding their cultural, social, and economic characteristics (Piñeros and Ruiz 1998; Sánchez 2000). The morbidity profile of these communities has changed because of the mobility of the rural population that grows illicit crops, displacement, and the extension of the internal armed conflict into formerly isolated regions inhabited by ethnic groups. All this is exacerbated by the difficulties of bringing health services to dispersed communities, particularly due to the violent conflict.

The information available leads to the conclusion that the health situation among indigenous peoples and Afro-Colombians is alarming due to the high incidence and prevalence of infectious diseases such as *Enfermedad Diarreica Aguda* (Acute Diarrhea Disease, EDA), *Infección Respiratoria Aguda* (Acute Respiratory Infection (IRA), and tuberculosis. An evaluation of vaccinations done between 1991 and 1996 showed that desertion rates are over 50 percent between the first and third dosage. There are problems with the continuity of vaccination campaigns and gaps in the cold chain to conserve biological material. Specialists point to an alarming increase in cases of Hepatitis B and malaria. Although a specific evaluation has not been done on this topic, many specialists also believe there is a high incidence of malnutrition, a phenomenon that particularly affects children in the communities where productive systems have been disturbed by the expansion of illicit crops and by the violence.

Indigenous peoples are specifically covered by the health system and a broad sector has been certified. The Afro-Colombian population has not been included within the information system for planning and provision of health services and Social Security. There are very low levels of certification in municipalities with an Afro-Colombian population—less than 1 percent in the Pacific and 3 percent in the Caribbean. The lack of personal identification among the Afro-Colombian population of the Pacific is one limitation in terms of registry. (See Chapters on Health and the Safety Net.)

### x. Educational Programs Directed Toward Indigenous Peoples and Afro-Colombians

Colombia has formulated very important policies and guidelines in terms of adjusting the school system to meet the needs of ethnic groups. However, despite these efforts in the field of ethnoeducation,[10] serious doubts persist regarding the quality of educational services, and there is concern over the urgent need to train teachers from these communities. The study of aboriginal languages—so important in the past as one of the pillars of the ethnoeducational process—has been abandoned, and people are being trained without any connection to the social, biological, and productive characteristics of these communities. (See Chapter on Education).

---

[10] The National Education Ministry has been carrying out an ethnoeducation training and professionalization program for teaching personnel across the country through a MEN–SECAB agreement.

### xi. Indigenous Participation in Public Investment

Since the promulgation of the 1991 Constitution, indigenous peoples have begun to have access to financial resources from the nation's current accounts (*Participacion en los Ingresos Corrientes de la Nacion*, PICN). It is the job of the National Department of Planning (DNP) to distribute, follow up on, and evaluate the fiscal transfers assigned to the indigenous homelands. Between 1994, when this process began, through 2001, 197,612 million pesos (in 2001 pesos) have been assigned to this sector. Participation grew in general terms until 2000, and then began to decrease, and hit its lowest point in 2001. If this trend continues, the financing for programs to service these communities will be seriously affected. Special care should be taken to ensure that councils and indigenous authorities invest these resources efficiently.

There have been problems and inconveniences with the investment process because mayors and communities are not familiar with the procedures to follow to execute PICN resources, and because of disagreements between municipalities and indigenous peoples over investment plans, the lack of agility in transferring resources from accounts to homelands, and the inefficiency of control and follow-up mechanisms. The new Administration could develop a strategy to accompany and follow up on public investments made in the homelands through the PICN in a way that improves the efficiency of investments, and that empowers communities in their capacity to adequately manage these resources.

### xii. Overview of the Planning Process and Defining Development Policies and Guidelines for Indigenous Peoples and Afro-Colombian Communities

Colombia has maintained a State policy on the treatment of matters related to indigenous peoples. The last five state development plans have included guidelines for policy on indigenous issues. Through the mandate of Law 70 of 1993, a special plan was contemplated for Afro-Colombians. The progress made in terms of the recognition of territorial rights is very important, as are advances in laws and regulations to provide health and educational services. However, serious problems remain in relation to methodologies used to evaluate the welfare of indigenous peoples and Afro-Colombian communities, and in relation to development plans. For example, the methodologies for measuring poverty have not been properly adapted to the conditions and particularities of indigenous peoples and Afro-Colombian communities. The new government needs to design quality-of-life indexes specifically for ethnic groups, and follow up on institutional and community action to measure impact on the quality of life for these populations.

There are five serious concerns regarding development plans:

- The weakening linkages between territorial entities and the homelands and communal lands, and the systematic follow-up on guidelines for development plans and their implementation
- Public investment for indigenous peoples has been falling in real terms
- The need to improve the community economies and the sustainable use of resources of the homelands and communal lands
- In relation to the development plan foreseen for Afro-Colombians, the lack of a baseline,[11] and the linking of environmental policies to environmental reality in the homelands and communal lands
- There is little support for institutional training and development.

The new government should focus on these areas by setting up expert panels with the participation of qualified personnel and indigenous peoples and Afro-Colombians. This will facilitate their understanding and the design of alternatives and guidelines for a policy that takes into account the reality of ethnic groups.

### *d) The Vision of the Future for Ethnic Groups*

Indigenous peoples in Colombia have experienced a slight demographic recovery. There is also a tendency among ethnic groups to change their lifestyles and settlement patterns. These communities are altering their demographic patterns and survival strategies because of the internal armed conflict, the expansion of illicit crops, and increasing national integration. This means that in the future, the indigenous, Afro-Colombian, and Roma populations will have greatly changed the way they live and consume. Many members of ethnic groups will become urbanized or semi-urbanized, with large groups living in cities, and in general the communities will demand new and improved services.

The fact that some laws now favor ethnic groups will mean that many rural farming communities of indigenous ancestry will also demand their rights. This trend could cause problems because of its implications from a budgetary point of view, in particular its effect on ethnic groups and on the homelands, and possible Territorial Indigenous Entities as regards their share of public investment. The demand for land programs either to recover ancestral lands or to acquire more land in areas where rural farmers only have access to tiny plots *(minifundios)* could cause complications.

These high costs may require that the State pay immediate attention to new populations. However, these costs can be compensated for in the long term through the existence of local communities with a strong sense of identity and belonging, greater social cohesion, greater willingness to assume the challenges of the present and future, and a desire to participate more effectively in the democratic life of the nation, regions, and localities. The experience of Colombia and other countries in Latin America shows that the most effective way to achieve social and economic development is to strengthen grassroots communities and provide integral institutional support for their productive and social initiatives. This is also one of the most effective ways to prevent the expansion and influence of illegal armed groups among these indigenous populations.

---

[11] Experts recommend that the Pacific Region be given special treatment, and that policies be based on the conclusions reached by the BioPacific Project, in the Pacific Agenda XXI, environmental nongovernmental organizations (World Wildlife Fund Colombia, Natura Foundation), and research centers.

With their extensive territories of jungle and natural savannahs, the natural resources on their lands, and their ancestral knowledge about ecosystems and species, ethnic groups in Colombia possess a very important natural patrimony. Now and in the immediate future, their territories are of strategic importance because of their biodiversity and the world's interest in conserving and using their natural resources in a sustainable manner. This reality will require considerable effort so that indigenous peoples and communities can carry out environmental and productive organization of their territories with the scientific, technical, and financial support of the state, and with a bicultural perspective. This will help strengthen the capacity of communities for conservation management and for sustainable use of biological resources, and will turn biodiversity into an opportunity so that these communities can autonomously improve their own quality of life and create their own development strategies. Future relations between the State and ethnic groups will revolve around these two themes: conservation and the sustainable use of biodiversity.

Colombia does not have a mechanism in place to measure the quality of life of ethnic groups. Despite the development of a body of law for this sector, there has been a growing deterioration of conditions for health and education.[12] The changes in the laws to assure greater and improved health and educational services have not had the same impact in rural areas as in urban areas, particularly in regions inhabited by ethnic groups. It is expected that high-impact infectious diseases will increase in the isolated communities, and that there will be a drop in the quality and competitiveness of the school system. Efforts should be made to counteract these trends using the existing body of law, and through the development of the needed financial and institutional mechanisms.

With the creation of Indigenous Territorial Entities, the territorial planning currently under way presents an opportunity to reorganize public finances and competencies that will guarantee public investment and basic services for indigenous territories. The current system of transferring public resources to indigenous homelands has been severely criticized because it favors only indigenous Colombians. Afro-Colombians have been left out and view this mechanism as discriminatory because they expect the same treatment.

---

[12] According to the UNDP–DNP Human Development Index, in 1999 Colombia rated 57 among 174 nations, which means it is a country with a medium level of human development, but with a tendency toward regression because the country had dropped four points since 1998. Some studies point to the unequal distribution of income, the violence caused by the armed conflict, and the expansion of illicit crops as the greatest obstacles to human development.

In the immediate future, the country needs to improve, recover, and extend its highway infrastructure and its productive infrastructure in general. It is possible that many of these projects will affect territories belonging to ethnic groups. This will probably mean that legal mechanisms for consultation and the definition of policies will need to be revised, as will mechanisms that permit consensus building with ethnic groups. This will help to avoid any negative impacts of the foreseen public works on the lives, culture, and environment of these communities.

According to many analysts, a lasting peace is essential for indigenous and Afro-Colombian communities to be able to reap the benefits of development. Such a peace will also help communities recover and raise the levels of productivity and competitiveness of their economies, improve health conditions, and strengthen their capacities and educational level in accordance with the new social, productive, and technological demands of the regions in which they live.

## III. Policy Recommendations

There is no greater contribution to the peaceful existence of indigenous peoples and Afro-Colombians than (a) recognizing and guaranteeing their territorial rights; (b) supporting through public policies for communities and their organizations the strengthening their capacity to manage their own affairs, territories, and resources; (c) creating secure conditions for the free exercise of their culture; (d) providing adequate basic services, particularly health and education, and services related to production; and (e) encouraging greater democratic participation by ethnic groups as citizens in all levels of public life. The following recommendations and proposals to the government are made in this spirit, and they are summarized in three general guidelines for policymaking.

### *a) Respect for New Models for Living Together and Human Rights Protection for Ethnic Groups*

To guarantee the fundamental rights of ethnic communities, the new government could carry out a tolerance campaign to inform the population about the basic rights of these groups, emphasizing the specific nature of these rights. The Public Ministry could carry out this campaign and could also create an appropriate mechanism to monitor the human rights situation of indigenous groups, Afro-Colombians, and the Roma peoples, and create an agenda to prevent, detect, and manage situations where these rights are threatened. An early-warning system is urgently needed, as is a program to prevent forced displacement of ethnic communities. Members of ethnic groups hope to return to their territories and farmlands, and it is the State's duty to guarantee them a safe return. The National System for the Displaced Population has made considerable progress, and the new Administration could provide the financial and institutional resources needed to support displaced families and communities belonging to ethnic groups.

The new government could also support initiatives that foster peace in indigenous and Afro-Colombian territories, and also increase the feasibility of the proposals of ethnic groups so that they can play a more active role in the peace process. This will also support a more active role for ethnic groups once peace is attained, as they rebuild their lives and social infrastructure in communities affected by the violence. Future negotiating entities for peace, and institutions involved in peace building, should consider including qualified members of indigenous peoples and Afro-Colombian organizations in these entities. The new government could also develop special programs for women, particularly heads of households, and children affected by and/or displaced by the violence.[13]

Policy guidelines and programs could also be considered by the new government that would reinforce the internal governing institutions of indigenous and Afro-Colombian peoples at all levels. It is necessary to move forward with respect to the study, consultation on, and implementation of indigenous jurisprudence in order to strengthen internal systems of social control of the indigenous communities themselves. The government could also follow up on the experiences of projects to voluntarily and manually substitute illicit crops, such as those carried out by the Indigenous Zonal Organization of Putumayo. These experiences can be replicated and adjusted to attain positive results in other indigenous and Afro-Colombian communities, in order to avoid the use of coercion and to promote alternatives for voluntary substitution.

### *b) Protection of Social, Economic, and Cultural Rights of Ethnic Groups*

There are various initiatives for territorial planning and organizing the nation, and for ethnic groups. The Indigenous Territorial Entities present an opportunity to reorganize public finances and entities in charge of the Indigenous Homelands. Existing alternatives should be studied with extreme care and, above all, the opportunities and risks of the proposed territorial reorganization should be examined. Warning signs should be carefully monitored concerning the possible fomenting of unnecessary tensions between indigenous groups and nonindigenous Colombians, and/or the fomenting of controversy and possible divisions that may erupt inside ethnic groups. A well-planned prior consultation process is probably the best tool to guide this process that could have profound implications for the lives of indigenous peoples. Afro-Colombian communal lands should also be recognized as special territorial units.

---

[13] Conditions for women and children are dire in the context of the armed conflict. The situation in Urabá and Chocó shows how the weight of the crisis generated by the violence and displacement falls on the shoulders of women, particularly those who are heads of households.

A new government could develop programmatic guidelines that are development oriented and that could consolidate the economy of ethnic territories based on biodiversity and other natural resources. These guidelines could take into account the possible negative environmental, social, and cultural impacts, and boost the aggregate value of local products. This process should include possible adjustments in legislation for the regulation of the regime of territorial entities recognized in the Constitution for indigenous territories, and improve investment practices for the fiscal transfers of public resources for the indigenous homelands, and channel these resources to health, education, and productive services with an emphasis on training. The new government could promote, develop, and adopt a policy and a special credit and financial program for indigenous homelands, communal lands of Afro-Colombian communities, and Roma communities, with a strong productive and entrepreneurial training component, and with adequate technical assistance.

The new government could significantly consolidate and demarcate indigenous homelands[14] and the communal lands of Afro-Colombians. Financial arrangements should be made so that responsible entities can carry out these tasks and delegate some surveying tasks to organizations to speed up the process. Some indigenous homelands were set up with technical and cartographic deficiencies, and these could be resolved by agreeing on programmatic guidelines. A detailed study is needed on the situation of lands occupied by Afro-Colombian communities in the Caribbean region.

The new government could evaluate and define a clear policy regarding the resettlement of rural farmers living on lands belonging to the Indigenous Homelands[15] in order to guarantee the territorial rights of the communities and farming families, and to contribute to improving the governability of indigenous territories by traditional authorities and to mitigate factors that can cause conflict. The new administration could also consider integral strategies for regions where ethnic groups and a stable nonindigenous farming community live together peacefully, with the goal of favoring models of peaceful coexistence and intercultural cooperation. This implies guaranteeing land security to both communities, ethnic groups as well as small farmers, and equal access to basic and productive services foreseen for the rural sector.

With the participation of territorial entities, the new administration could make an effort to improve community infrastructure of services for ethnic groups, especially in health, education, production, recreation, and sports. Some experts have recommended forming a high-level commission to evaluate the health and education situation of ethnic groups and to propose alternatives for government services, particularly for the most vulnerable population. This commission could also propose and follow up on the plans, programs, and projects for investment in health and education. The new government is in a position to make an important contribution to the health of indigenous peoples and the Afro-Colombian and Roma communities by extending the coverage of immunization campaigns and, in particular, to protect children. The promotion of aboriginal languages and the specialization in the education of ethnic groups are of special interest.

---

[14] At this point, coverage is nearly complete in terms of the recognition of indigenous territorial rights. There is one ethnic group in the Amazon along the Bernardo River that has not been contacted and that urgently needs protection.

[15] When they were set up, some of the indigenous homelands affected colonizers or nonindigenous occupants that were living within the communally owned territory. The state is obligated to compensate these legal occupants by purchasing the farmlands that they were cultivating.

### *c) Conservation and Sustainable Use of Natural Resources of the Collective Territories and Indigenous Homelands*

The new government could gear its policies toward activating adequate mechanisms to strengthen the participation of indigenous and Afro-Colombian communities in the management and benefits of sustainable use of biodiversity.[16] In the same manner the government could promote and strengthen the equal participation of women in management and sharing in the benefits of biodiversity. Through support for pilot projects of participatory organizations, the government could promote the definition and elaboration of criteria, plans, and the regulation of management of collective territories of Afro-Colombian communities and Indigenous Homelands. At the same time the new government must keep in mind that these communities and their organizations should have the ability to administer their natural patrimony in a sustainable manner from an ecological, economic, and cultural point of view.[17] Thus, it is necessary to channel sufficient resources and technical assistance to support community organizations so that they can speed up plans for environmental organization and the sustainable use of their territories. The *Ministerio de Medio Ambiente* (Environment Ministry, MMA) and the Autonomous Regional Corporations could develop a program of support and technical assistance along these lines.

---

[16] The strengthening of the community in environmental terms also implies developing its capacity to participate in and negotiate on crucial issues such as the conservation of biodiversity in their territories and the sustainable use of biological and genetic resources, both wild and cultivated. It also means strengthening traditional organizations and systems of authority, and in particular the development of cultural initiatives to strengthen their own systems of management for their territories.

[17] The Ministry of the Environment has supported community initiatives for organization and planning, and there are successful experiences that nongovernmental organizations have supported (WWF, Gaia Foundation, ETNOLLANO) that can also be used. At the same time, it is necessary to value, recover, and develop the potential of sustainable components of indigenous and Afro-Colombian systems for the use and conservation of biodiversity.

The new government should launch a strategy for the protection and conservation of strategic ecosystems. This strategy should integrate the network of existing reserves and parks, indigenous homelands, the communal lands of Afro-Colombian communities, and initiatives of civil society in general. Achievements by the new government in these areas could mean that the protection of wild ecosystems contributes to the strengthening of territories and traditional systems of knowledge, conservation, and sustainable use of biodiversity. The Ministry of the Environment could promote a process to develop the body of law to support Chapter IV of Law 70 regarding land use and the protection of natural and environmental resources in the communal territories of Afro-Colombians. The communities and institutions should be widely consulted about this body of law.

The new government should revise and adjust legal mechanisms and develop entities that can direct the consultation process. It must ensure that indigenous and Afro-Colombian communities are informed of this process, and that they agree with them before they are undertaken. This is particularly important with respect to new investments in mining, hydrocarbon exploitation, forestry, and bioprospecting. In addition to laws, the government could also advance in the implementation of "codes of conduct" and voluntary certification so that the patrimonial rights of these communities, and their right to participate and benefit from productive processes, are fully recognized.

# Annex I
# Legal Advances in Colombia as Related to the Rights of Ethnic Groups

### *a) Advances in the Field of Indigenous Territorial Rights*

Indigenous territorial rights were consecrated in the 1991 Constitution, and the foundation was laid for future territorial entities to autonomously manage the territories, conceived as appropriate spaces, within the general framework of the State. Currently, a project for the Law of Territorial Organization is being contemplated. Law 160 of 1994 also developed the fundamental norms regarding indigenous lands.

### *b) Gains in the Consolidation of the Rights of Afro-Colombian Communities*

The Constitution contemplates the cultural particularities of the Afro-Colombian population and recognizes these communities for the first time as an ethnic group. Once this Constitution took effect, a vigorous social movement of Afro-Colombian communities developed, particularly in the Pacific region, to demand the fulfilment of their territorial rights. Through the development of the transitory article 55 of the Constitution, Law 70 of 1993 was expedited in order to recognize and provide property titles for the communal lands of Afro-Colombian communities. To develop and support this law, the national government reoriented loan BIFF 3692 CO and channelled it toward the collective titling process for Afro-Colombians and indigenous peoples in the Pacific region.

### *c) Advances in the Health Field*

According to Resolution 10013 of 24 September 1981 of the Health Ministry, programs for primary care provided to indigenous communities should be adapted to the organizational, political, administrative, and socioeconomic structures of these communities. Their values, beliefs, traditions, attitudes, and cultural rights must be respected. After implementation of the 1991 Constitution and Law 1000 of 1993, in particular, a subsystem of health care was set up that covered a broad sector of the indigenous population. By 2000, this system had provided 472,000 subsidies to indigenous Colombians, with an estimated coverage of 64 percent (Sanchez 2000:144). This system has permitted the participation of the Associations of Councils regulated by Decree 1088 of 1993 so that they can operate as Enterprises for the Administration of the Subsidized Regime, Health Solidarity Enterprises, and Institutional Providers of Health Care, the three legal entities that are contemplated within the general system. This specific subsystem does not exist for the Afro-Colombian communities. Through Decree 300 of 27 February 2001, laws were passed and regulations implemented to support the Constitution and functioning of the entities of health promotion (EPSs). The EPSs were made up of councils and/or traditional indigenous authorities. Through Law 691 of September 2001, regulations were formulated to facilitate the participation of ethnic groups in Colombia's General System of Social Security.

### *d) Legal Advances in Education*

Decree 1142 of 19 July 1978 and Resolution No. 3454 of 13 April 1984 of the National Education Ministry laid the groundwork and general guidelines for education for indigenous peoples. After the 1991 Constitution entered into effect, Law 115 was enacted in 1994, and its third chapter is on education for ethnic groups including indigenous peoples and Afro-Colombians. This law establishes the principles of intercultural exchange and respect, an integral approach, linguistic diversity, community participation, flexibility, and progressivity. This law was supported by Decree 804 in 1995. As a support for Article 42 of Law 70, Decree No. 2249 of 1995 was expedited to set up the Pedagogical Commission of Black Communities.

### *e) Legal Advances in the Environmental Field*

Colombia is one of the most biodiverse countries on the planet. While covering less than 1 percent of the earth's surface, it is home to an estimated 10 percent of the total species of living flora and fauna (Hernández and Sánchez 1988). According to "An Amazon Without Myths" (1994:64–65), the country also leads the world in number of bird species (1,721 species identified), is second in terms of amphibians (359 species) and angiosperms (45,000), is sixth in number of reptiles (383), and is seventh in the number of mammals (359) and butterflies (59).

The theme of conservation and sustainable use of wilderness areas is closely linked with the territories and lives of indigenous peoples and Afro-Colombian communities. Nearly 75 percent of the country's forests are located within the territories that belong collectively to indigenous Colombians (Indigenous *Resguardos*) or to Afro-Colombian communities (Communal Lands of Black Communities). The preservation of the natural patrimony of the nation depends on the conservation and sustainable use of these collective territories, and on the physical and cultural survival of the communities the subsistence of which is directly based on biodiversity.

There are two fundamental legal instruments in Colombia in terms of natural resources: the National Code for Environmental Protection and Renewable Natural Resources, and Law 99 of 1993, which set up the Ministry of the Environment, reorganized the public sector charged with managing and conserving the environment and renewable natural resources, and established the National Environmental System. This law mandates representation of members of the indigenous peoples on the boards of the Regional Autonomous Corporations, which are charged with environmental management at the regional and departmental level.[18]

### *f) Overview of the Current Development of Laws and Institutions*

The 1991 Constitution represented a definitive step forward for indigenous peoples and Afro-Colombians with respect to the consolidation of their most basic rights. The foundation has been laid for a new relationship between the State and ethnic groups, and for a new model of society based on the acceptance of the pluriethnic and multicultural character of the nation.

The *acción de tutela* has become a fundamental tool for the defense of indigenous rights, and the controversies that this new legal defense body has generated have produced a rich body of jurisprudence. The current Constitutional Court deserves special mention for the development of laws that support the aspiration of deepening democratic participation, pluralism, and the values of diversity. Within the new institutionality, the legal body *Defensoría del Pueblo* (Public Ombudsman's Office) has also played a decisive role in the protection of indigenous rights. Although laws have already been written regarding *popular action* for the defense of collective rights, no progress has been made on the definition of own jurisdiction of indigenous peoples.

Some specialists believe that new laws need to be developed and legislation needs to be harmonized in many fields to more effectively consolidate the rights of indigenous peoples. The *Fuero Indígena* (Indigenous Tribunal) has still not been revised, and there are legal gaps, particularly in the environmental field, that still need to be resolved. Within the framework of the Caribbean Development Bank Agreement on Biological Diversity and Decision 391 of the *Comunidad Andina* (CAN), it is necessary to protect the biological, cultural, and intellectual patrimony of indigenous peoples and their communities.

The Indigenous Territorial Entities envisioned in the 1991 Constitution have not been legally developed. The development of this body of law is a difficult process because it is linked to the Organic Law of Territorial Organization, and because of the lack of consensus and clarity regarding the scope of these laws. It is hoped that these territorial entities will provide an efficient way to build development alternatives that are autonomous, and that fit the needs and desires of indigenous peoples and Afro-Colombian communities.

---

[18] Law 99 in Article 22—Promoting and Disseminating the Environmental Experience of Traditional Cultures—establishes the following: "The Ministry and the scientific institutes that promote development and the dissemination of knowledge, values and technologies as regards environmental management and natural resources of indigenous cultures and other ethnic groups." Article 76 ratifies ILO Convention 169 and the Constitution: "The exploitation of natural resources should be done without affecting the cultural, social and economic integrity of indigenous communities and traditional black communities, in agreement with Law 70 of 1993 and Article 330 of the national constitution, and the decisions on these matters will be taken after consulting with the representatives of these communities." Article 67 establishes that the Indigenous *Resguardos*—a territorial entity defined in the 1991 Constitution—will have the same functions and duties as defined for municipalities in environmental matters.

# Annex II

## Table A.II.1 Ethnic Groups and Indigenous Population by Department, 2001

| *Administrative and Political Division* | *Number of Ethnic Groups*** | *Population* | |
|---|---|---|---|
| | | *Year 2001* | *Percent of Nation* |
| AMAZON | 22 | 21,375 | 2.72 |
| VAUPES | 19 | 21,727 | 2.77 |
| GUAVIARE | 12 | 5,364 | .68 |
| PUTUMAYO | 10 | 23,645 | 3.01 |
| CAQUETA | 9 | 7,089 | .9 |
| CAUCA | 9 | 189,912 | 24.18 |
| CASANARE | 7 | 5,536 | .7 |
| BOLIVAR | 4 | 328 | .04 |
| ATLANTIC | 4 | 449 | .06 |
| ARAUCA | 7 | 3,591 | .46 |
| META | 5 | 6,815 | .87 |
| VICHADA | 6 | 20,887 | 2.66 |
| MAGDALENA | 4 | 14,075 | 1.79 |
| GUAINIA | 4 | 14,331 | 1.82 |
| ANTIOQUIA | 5 | 16,291 | 2.07 |
| CESAR | 4 | 17,108 | 2.18 |
| NARIÑO | 6 | 87,304 | 11.12 |
| LA GUAJIRA | 4 | 149,273 | 19.01 |
| HUILA | 4 | 1,571 | .20 |
| VALLE DEL CAUCA | 4 | 9,377 | 1.19 |
| CHOCO | 5 | 36,727 | 4.68 |
| NORTE DE SANTANDER | 2 | 4,117 | .52 |
| TOLIMA | 2 | 25,722 | 3.28 |
| CORDOBA | 3 | 23,934 | 3.05 |
| CALDAS | 4 | 48,885 | 6.22 |
| SUCRE *** | 1 | 11,755 | 1.50 |
| QUINDIO | 2 | 99 | .01 |
| CUNDINAMARCA | 1 | 1,859 | .24 |
| BOYACA | 1 | 4,725 | .60 |
| RISARALDA | 1 | 9,745 | 1.24 |
| SAN ANDRES Y PROVIDEN* | 1 | 21 | 0 |
| SANTANDER * | 1 | 419 | .05 |
| BOGOTÁ | 0 | 1,300 | .17 |
| **TOTAL** | | **785,356** | **100.00** |

---

* The majority groups in these departments are Arhuaco, Barí, Coyaima, Páez, and Wayuu.

**This column cannot be added up because of the simultaneous presence of an ethnic group in two or more departments.

***Corresponds to the indigenous homeland of San Andrés de Sotavento reported in the department of Córdoba.

*Source:* DANE/INCORA DNP–DDT 2001.

## Table A.II.2 Ethnic Groups of Colombia, Population and Area, 2001

| *Cod.* | *Name of Ethnic Group* | *Population* | *Percent Total Population* | *Area (hectares)* | *Percent Total Area* |
|---|---|---|---|---|---|
| AC | ACHAGUA (ajagua, axagua) | 283 | 0.0360 | 3,318 | .0108 |
| AM | AMORÚA (wipiwe) | 178 | 0.0227 | 94,670 | .3069 |
| AD | ANDOKE (andoque, cha'oje, businka) | 597 | 0.0760 | 57,900 | .1877 |
| AR | ARHUACO (Ijka, bíntukua, ika, aruaco) | 14,799 | 1.8844 | 196,028 | 1.8800 |
| AW | AWA (cuaiker, cuaiquer) | 15,364 | 1.9563 | 252,318 | .8180 |
| BA | BARA (wai maja, posanga-mira) | 109 | 0.0139 | 0 | .0000 |
| BS | BARASANA (barasano, banera yae, hanera oka) | 2,008 | 0.2557 | 0 | .0000 |
| BI | BARÍ (motilón, barira, dobocubi, cunausaya) | 3,617 | 0.4606 | 122,200 | .3962 |
| BT | BETOYE (jirarre)-NHLA- | 800 | 0.1019 | 702 | .0023 |
| BO | BORA (meamuyna) | 701 | 0.0893 | 0 | .0000 |
| CÑ | CAÑAMOMO (Incluye San Lorenzo)* -NHLA- | 26,083 | 3.3212 | 4,450 | .0144 |
| CA | CARAPANA (karapana, moxdoa, muxtea, mi tea) | 464 | 0.0591 | 0 | .0000 |
| CH | CHIMILA (Ette E´neka) | 900 | 0.1146 | 379 | .0012 |
| CI | CHIRICOA | 173 | 0.0220 | 0 | .0000 |
| CO | COCAMA (kokama) | 792 | 0.1008 | 87,481 | .2836 |
| CC | COCONUCO -NHLA- | 6,767 | 0.8616 | 27,934 | .0906 |
| KR | COREGUAJE (korebahu, coreguaje, coreguaxe) | 2,212 | 0.2817 | 21,915 | .0710 |
| CN | COYAIMA-NATAGAIMA (pijao) -NHLA- | 24,663 | 3.1404 | 22,753 | .0738 |
| DE | DESANO (wira, kotedia, winá) | 2,457 | 0.3129 | 265,179 | .8597 |
| DJ | DUJOS* -NHLA- | 98 | 0.0125 | 954 | .0031 |
| EM | EMBERA | 49,686 | 6.3266 | 944,058 | 3.0606 |
| EC | EMBERA CHAMÍ | 5,511 | 0.7017 | 33,261 | .1078 |
| EK | EMBERA KATÍO | 32,899 | 4.1891 | 643,004 | 2.0846 |
| EP | EPERARA SIAPIDARA | 651 | 0.0829 | 6,170 | .0200 |
| GU | GUAMBIANO (misag, huamimehab, silviano) | 23,462 | 2.9874 | 23,694 | .0768 |
| GA | GUANACA -NHLA- | 723 | 0.0921 | 1,000 | .0032 |
| GY | GUAYABERO (mitua, guayavero, cunimia) | 1,118 | 0.1424 | 68,200 | .2211 |
| HI | HITNU (macaguane, jitnu, macaguán, hutnun) | 441 | 0.0562 | 5,029 | .0163 |
| RB | INDÍGENOUS RESIDENTS OF BOGOTA** | 1,300 | 0.1655 | 0 | .0000 |
| IG | INGA (inganao) | 19,079 | 2.4293 | 109,913 | .3563 |
| KA | KAMËNTSA (kamnsá, camsá, sibundoy-gache) | 4,773 | 0.6077 | 5,231 | .0170 |
| KJ | KARIJONA (carijona, carifuna, hianacoto-umaua, kaliohona) | 307 | 0.0391 | 1,619,180 | 5.2494 |

**Table A.II.2 (continued)**

| *Cod.* | *Name of Ethnic Group* | *Population* | *Percent Total Population* | *Area (hectares)* | *Percent Total Area* |
|---|---|---|---|---|---|
| KY | KAWIYARÍ (cabiyarí, kawiarí, kabiyarí) | 311 | 0.0396 | 0 | .0000 |
| KF | KOFÁN (cofán) | 877 | 0.1117 | 26,056 | .0845 |
| KO | KOGUI (kággaba, cogui, kogi, koggian, koghi) | 9,911 | 1.2620 | 383,877 | .0000 |
| KU | KUBEO (paniwa, cubeo, cobewa, hipnwa, kaniwa) | 6,647 | 0.8464 | 3,432,897 | 11.1294 |
| KB | KUIBA (cuiba, wamone, chiricoa, maiben) | 2,445 | 0.3113 | 1,599 | .0052 |
| KP | KURRIPAKO -incluye baniva- (curripaco, kurripaco) | 7,827 | 0.9966 | 3,616,357 | 11.7242 |
| LE | LETUAMA (lituama, detuama) | 705 | 0.0898 | 1,020,320 | 3.3079 |
| MK | MAKAGUAJE (macaguaje, macaguaxe) | 50 | 0.0064 | 0 | .0000 |
| MA | MAKUNA (sara, ide masa, buhagana, siroa, tsoloa) | 1,009 | 0.1285 | 0 | .0000 |
| MG | MASIGUARE | 416 | 0.0530 | 0 | .0000 |
| MT | MATAPÍ (jupichiya) | 220 | 0.0280 | 0 | .0000 |
| MI | MIRAÑA (mirnha, miraya) | 715 | 0.0910 | 0 | .0000 |
| MS | MUISCA (chibcha) -NHLA- | 1,859 | 0.2367 | 0 | .0000 |
| NA | NASA (páez, paez, nasa yuwe) | 138,501 | 17.6354 | 401,065 | 1.3002 |
| NO | NONUYA (nunuya) | 228 | 0.0290 | 59,840 | .1940 |
| NU | NUKAK (makú, macú, cacua, judpa, yujupde, wacará) | 1,483 | 0.1888 | 954,480 | 3.0944 |
| OC | OCAINA (okaina, orebe, diokaya) | 137 | 0.0174 | 0 | .0000 |
| PT | PASTO (quillacinga, quillasinga) -NHLA- | 69,789 | 8.8863 | 39,880 | .1293 |
| PI | PIAPOCO (dzase, tzase, cuipaco, piapoko, wenéwika) | 4,926 | 0.6272 | 424,970 | 1.3777 |
| PR | PIAROA (dearuwa, wo´tiheh, maco) | 773 | 0.0984 | 181,188 | .5874 |
| PY | PIRATAPUYO (parata-puya, wai kana, uaikama, waikhana) | 697 | 0.0887 | 303 | .0010 |
| PS | PISAMIRA (papiwa, pisatapuyo, wasona, wasina) | 61 | 0.0078 | 0 | .0000 |
| PV | PUINAVE (puinabe, uaipi, guaipunare, wantyinht) | 6,604 | 0.8409 | 4,012,183 | 13.0075 |
| SA | SÁLIBA (sáliva) | 1,929 | 0.2456 | 42,682 | .1384 |
| SE | SENÚ -NHLA- | 34,566 | 4.4013 | 11,963 | .0388 |
| SK | SIKUANI (JIVE) (guahibo, guajibo) | 23,006 | 2.9294 | 2,400,329 | 7.7818 |
| SI | SIONA (ganteyabain, ganteya, ceona, zeona, koka kanú) | 734 | 0.0935 | 13,127 | .0426 |
| SR | SIRIANO (sura masa, cirnga, chiranga, si-ra) | 749 | 0.0954 | 0 | .0000 |
| TW | TAIWANO (tajuano, eduria, taiunano) | 22 | 0.0028 | 0 | .0000 |
| TN | TANIMUKA (ufaina, tanimuca, tanimboka, ohañara, opaima) | 1,247 | 0.1588 | 0 | .0000 |

**Table A.II.2 (continued)**

| *Cod.* | *Name of Ethnic Group* | *Population* | *Percent Total Population* | *Area (hectares)* | *Percent Total Area* |
|---|---|---|---|---|---|
| TA | TARIANO (tariana) | 445 | 0.0567 | 0 | .0000 |
| TT | TATUYO (juna maja, pamoa, tatutapuyo, sina, sura) | 331 | 0.0421 | 0 | .0000 |
| TI | TIKUNA (ticuna, tukuna) | 7,102 | 0.9043 | 276,645 | .8969 |
| TO | TOTORÓ -NHLA- | 4,130 | 0.5259 | 3,406 | .0110 |
| TS | TSIRIPU (mariposo, siripu) | 163 | 0.0208 | 0 | .0000 |
| TU | TUCANO (desea, dasea, tucano, yepa masa) | 6,996 | 0.8908 | 576,655 | 1.8695 |
| TL | TULE (kuna, tulemala, bayano, yule, caribe-kuna) | 1,231 | 0.1567 | 10,298 | .0334 |
| TY | TUYUKA (dojkapuara) | 642 | 0.0817 | 0 | .0000 |
| UI | UITOTO (witoto, huitoto, murui, muinane, mi-ka, mi-pode) | 7,343 | 0.9350 | 6,380,965 | 20.6870 |
| UW | U'WA (tunebo, uwua, lache) | 7,231 | 0.9207 | 352,422 | 1.1425 |
| WN | WANANO (guanano, kotoria, uanano) | 1,395 | 0.1776 | 38,750 | .1256 |
| WU | WAUNAN (waunana, wounaan, noanamá, waumeu) | 8,177 | 1.0412 | 189,452 | .6142 |
| WA | WAYUU (guajiro, wayu, uáira, waiu) | 149,827 | 19.0776 | 1,082,547 | 3.5096 |
| WW | WIWA (arzario, guamaca, malayo, sanjá, dumuna) | 1,922 | 0.2447 | 209 | .0007 |
| YG | YAGUA (ñihamwo, mishara) | 297 | 0.0378 | 4,209 | .0136 |
| YN | YANACONA -NHLA- (mitimae) | 21,457 | 2.7321 | 43,098 | .1397 |
| YA | YAUNA (kamejeya) | 103 | 0.0131 | 0 | .0000 |
| YK | YUKO (yukpa, yuco) | 3,651 | 0.4649 | 34,218 | .1109 |
| YU | YUKUNA (yucuna, yukuna-mapapí) | 550 | 0.0700 | 212,320 | .6883 |
| YR | YURI (carabayo, arojes) | 217 | 0.0276 | 0 | .0000 |
| YT | YURUTI (wai jiara masa, wadyana, wadzana, totsoca, waikana) | 687 | 0.0875 | 0 | .0000 |
| **TOTAL** | | **785,356** | | **30,845,231** | |

* No known denomination. Given the same name as the homeland.

** Corresponds to representatives of 47 ethnic groups, residents of Bogotá, according to the 1993 census.

-NHLA- : Do not speak their respective aboriginal language.

Ethnic groups with other names in parentheses: Corresponds to the way the ethnic group describes itself or is described in ethnographic literature (Annex I).

*Note:* The Muinane, located in the Amazon department, are included within the Uitoto ethnic group. Some ethnic groups that appear with zero in the hectare column share a territory with other ethnic groups. This is the case for the Koguis and Arhuacos in the Sierra Nevada of Santa Marta, and the Uitotos that share the eastern part of the Vaupés Homeland with 18 ethnic groups.

*Sources:* DNP/DDT "Guía Etnográfica de Colombia." Arango and Sánchez (1998). DANE, postcensus study, updated as of December 2001 with homelands constituted by INCORA.

# Annex III

## A.III.1 Some Basic Demographic Indicators in Four Indigenous Regions, Piñeros Marion, and Ruiz Magda, 1998

| *Indicator* | *Region Caribbean 1993–94 Indigenous*[1] | *Region Andean 1993–94 Indigenous*[1] | *Region Amazons 1993–94 Indigenous*[1] | *Region Tierra (1972–85) (1985–93) Indigenous*[2] | *Nation*[3] |
|---|---|---|---|---|---|
| Basic needs not met – NBI – (per person) | | | | | 25.44 |
| Gross birth rate – TBN – per thousand | | | | | 26.97 |
| Life expectancy: Men (years) | | | | 38.0<br>45.23 | 55.40 |
| Life expectancy: Women (years) | | | | 40.75<br>49.0 | 57.80 |
| Masculinity Index at Birth | 105 | | | 105<br>105 | |
| Population under 15 years of age | 48 | 43 | 45 | | |
| Population under 20 years of age | | | | 50 | |
| Global fertility rate (children) | 8.3 | 5.5 | 6.9 | 7.67 | 3.02 |
| Urban fertility rate (children) | | | | 7.67<br>2.75 | 2.65<br>4.41 |
| Rural fertility rate (children) | | | | 7.67<br>5.68 | |
| Infant mortality rate (per 1000) | 111.7 | 40.7 | 48.6 | 138 | 33.9 |
| Annual growth rate (per 1,000 inhabitants) | | | | | 17.66 |
| Illiteracy (population over 15 years of age) | | | | | 8.6 |
| Gross rate of school enrollment (primary) | | | | | 113.15 |
| Gross rate of school enrollment (secondary) | | | | | 80.42 |
| Net rate of enrollment (primary) | | | | | 82.89 |
| Net rate of enrollment (secondary) | | | | | 61.95 |
| Urban population* | 7.4 | 7.4 | 7.4 | | 70.8 |
| Rural population* | 92.6 | 92.6 | 92.6 | | 29.2 |
| Doctors per 10,000 inhabitants | | | | | 9.2 |

1. Piñeros and Ruiz (1998).
2. Análisis Demográfico de Tierradentro, Cauca, CENCOA, Cali, March 1998.
3. Presidencia de la República, DNP, Plan Nacional de Desarrollo – Bases – 1998–2002 and DNP, DIOGS.

Table A.III.2 Colombia, Population and Indigenous Area and the Population and Total Extension by Department, December 2001

| *Political and Administrative Division* | *Total Population* | *Indigenous Population* | *Percent Indigenous Population* | *Perent National Indigenous Population* | *Total Area (Hectares)* | *Indigenous Area (Hectares)* | *Percent Indigenous Area* | *Percent National Indigenous Area* |
|---|---|---|---|---|---|---|---|---|
| Amazon | 72,350 | 20,521 | 28.36 | 2.61 | 10,966,500 | 9,145,937 | 83.40 | 29.65 |
| Antioquia | 5,448,304 | 16,291 | 0.30 | 2.07 | 6,361,200 | 329,919 | 5.19 | 1.07 |
| Arauca | 247,444 | 3,591 | 1.45 | 0.46 | 2,381,800 | 128,167 | 5.38 | 0.42 |
| Atlántic | 2,171,395 | 449 | 0.02 | 0.06 | 338,800 | 0 | 0.00 | 0.00 |
| Bogotá | 6,571,749 | 1,300 | 0.02 | 0.17 | 158,700 | 0 | 0.00 | 0.00 |
| Bolívar | 2,039,240 | 328 | 0.02 | 0.04 | 2,597,800 | 0 | 0.00 | 0.00 |
| Boyacá | 1,373,028 | 4,725 | 0.34 | 0.60 | 2,318,900 | 220,275 | 9.50 | 0.71 |
| Caldas | 1,119,479 | 48,885 | 4.37 | 6.22 | 788,800 | 30,106 | 3.82 | 0.10 |
| Caquetá | 427,378 | 6,835 | 1.60 | 0.87 | 8,896,500 | 638,294 | 7.17 | 2.07 |
| Casanare | 292,523 | 5,536 | 1.89 | 0.70 | 4,464,000 | 148,476 | 3.33 | 0.48 |
| Cauca | 1,276,423 | 190,069 | 14.89 | 24.20 | 2,930,800 | 531,150 | 18.12 | 1.72 |
| Cesar | 978,650 | 17,874 | 1.83 | 2.28 | 2,290,500 | 230,455 | 10.06 | 0.75 |
| Chocó | 408,965 | 36,766 | 8.99 | 4.68 | 4,653,000 | 1,222,444 | 26.27 | 3.96 |
| Córdoba | 1,337,271 | 23,934 | 1.79 | 3.05 | 2,502,000 | 117,932 | 4.71 | 0.38 |
| Cundinamarca | 2,176,108 | 1,859 | 0.09 | 0.24 | 2,262,300 | 0 | 0.00 | 0.00 |
| Guainía | 38,236 | 14,331 | 37.48 | 1.82 | 7,223,800 | 7,083,742 | 98.06 | 22.97 |
| Guaviare | 120,177 | 5,792 | 4.82 | 0.74 | 2,084,800 | 1,854,243 | 88.94 | 6.01 |
| Huila | 937,733 | 1,571 | 0.17 | 0.20 | 4,232,700 | 2,444 | 0.06 | 0.01 |
| La Guajira | 491,222 | 156,046 | 31.77 | 19.87 | 1,989,000 | 1,466,424 | 73.73 | 4.75 |

*(continues on next page)*

**Table A.III.2 (continued)**

| *Political and Administrative Division* | *Total Population* | *Indigenous Population* | *Percent Indigenous Population* | *Perent National Indigenous Population* | *Total Area (Hectares)* | *Indigenous Area (Hectares)* | *Percent Indigenous Area* | *Percent National Indigenous Area* |
|---|---|---|---|---|---|---|---|---|
| Magdalena | 1,307,249 | 6,536 | 0.50 | 0.83 | 2,318,800 | 379 | 0.02 | 0.00 |
| Meta | 713,325 | 7,971 | 1.12 | 1.01 | 8,563,500 | 888,510 | 10.38 | 2.88 |
| Nariño | 1,658,043 | 87,304 | 5.27 | 11.12 | 2,165,800 | 332,419 | 15.35 | 1.08 |
| Northern Santander | 1,372,073 | 4,117 | 0.30 | 0.52 | 3,326,800 | 122,200 | 3.67 | 0.40 |
| Putumayo | 340,911 | 24,391 | 7.15 | 3.11 | 2,488,500 | 143,299 | 5.76 | 0.46 |
| Quindío | 570,869 | 99 | 0.02 | 0.01 | 184,500 | 0 | 0.00 | 0.00 |
| Risaralda | 958,746 | 9,745 | 1.02 | 1.24 | 414,000 | 28,311 | 6.84 | 0.09 |
| San Andrés and Providencia | 75,118 | 21 | 0.03 | 0.00 | 4,400 | 0 | 0.00 | 0.00 |
| Santander | 1,985,773 | 419 | 0.02 | 0.05 | 3,053,700 | 0 | 0.00 | 0.00 |
| Sucre | 808,775 | 11,755 | 1.45 | 1.50 | 1,091,700 | 0 | 0.00 | 0.00 |
| Tolima | 1,300,055 | 25,722 | 1.98 | 3.28 | 2,356,200 | 27,613 | 1.17 | 0.09 |
| Valle Del Cauca | 4,240,653 | 9,338 | 0.22 | 1.19 | 2,214,000 | 35,259 | 1.59 | 0.11 |
| Vaupés | 30,529 | 21,504 | 70.44 | 2.74 | 6,526,800 | 4,120,897 | 63.14 | 13.36 |
| Vichada | 85,921 | 19,731 | 22.96 | 2.51 | 10,024,200 | 1,996,336 | 19.92 | 6.47 |
| **Total** | **42,975,715** | **785,356** | **1.83** | **100.00** | **114,174,800** | **30,845,231** | **27.02** | **100.00** |

*Source:* DNP–DDT "Guía Etnográfica de Colombia," based on DANE/population projections according to department for 2001.

# Annex IV

## Table A.IV.1 ICN Resources Assigned to Homelands 1994–2001 (2001 pesos)

| *Department* | *1994* | *1995* | *1996* | *1997* | *1998* | *1999* | *2000* | *2001* |
|---|---|---|---|---|---|---|---|---|
| Amazon | 163,796,791 | 252,637,527 | 390,737,952 | 551,150,683 | 779,473,184 | 1,062,554,257 | 1,390,276,210 | 1,461,927,436 |
| Antioquia | 41,822,746 | 65,880,943 | 120,933,258 | 206,690,145 | 340,527,270 | 521,248,161 | 838,931,002 | 894,588,202 |
| Arauca | 13,203,677 | 20,216,479 | 38,916,261 | 54,892,798 | 75,497,625 | 100,585,437 | 183,038,130 | 194,010,787 |
| Boyacá | 15,371,157 | 23,535,019 | 34,214,809 | 45,389,149 | 56,491,867 | 234,342,467 | 302,719,866 | 320,248,575 |
| Caldas | 240,298,646 | 496,605,768 | 721,956,914 | 1,018,347,631 | 1,415,448,507 | 1,721,602,060 | 2,335,898,690 | 3,381,034,147 |
| Caquetá | 26,119,921 | 39,992,423 | 64,392,729 | 105,272,027 | 153,860,301 | 245,955,315 | 323,179,498 | 349,480,969 |
| Casanare | 46,854,310 | 70,300,391 | 105,155,146 | 148,325,356 | 204,001,088 | 251,755,742 | 368,866,855 | 384,405,989 |
| Cauca | 1,248,314,514 | 1,911,314,602 | 2,964,601,973 | 4,301,051,990 | 6,080,493,062 | 8,312,283,960 | 11,197,631,812 | 12,201,986,150 |
| Cesar | 158,256,494 | 242,309,139 | 355,415,426 | 501,327,060 | 698,388,659 | 904,753,485 | 1,160,968,816 | 1,214,605,995 |
| Chocó | 221,532,574 | 334,637,564 | 493,037,747 | 700,968,913 | 975,881,466 | 1,706,975,961 | 2,323,628,039 | 2,458,290,531 |
| Córdoba | 246,391,791 | 377,254,510 | 548,446,027 | 773,603,902 | 1,099,705,261 | 1,330,748,228 | 1,707,402,131 | 1,772,637,025 |
| Cundinamarca | 20,557,526 | 31,476,021 | 45,759,211 | 64,545,114 | 88,772,977 | 107,500,135 | 137,747,289 | 149,315,995 |
| Guainía | 143,427,217 | 219,603,815 | 319,256,107 | 450,322,790 | 619,357,146 | 736,297,495 | 962,488,202 | 999,286,330 |
| Guaviare | 9,576,493 | 14,662,911 | 47,580,723 | 72,565,554 | 104,818,037 | 162,166,677 | 261,515,070 | 283,400,373 |
| Huila | 1,061,622 | 1,625,410 | 20,602,729 | 33,192,711 | 45,651,956 | 55,282,480 | 70,837,228 | 73,542,551 |
| La Guajira | 1,149,750,990 | 2,123,180,382 | 3,156,204,646 | 4,451,946,489 | 6,146,917,607 | 7,479,250,441 | 9,758,097,111 | 10,257,954,981 |
| Magdalena | 52,339,282 | 80,137,489 | 146,877,525 | 207,176,251 | 284,942,560 | 372,980,561 | 478,440,716 | 497,719,983 |
| Meta | 47,340,946 | 64,695,973 | 98,976,702 | 148,290,540 | 203,953,303 | 368,405,632 | 530,450,480 | 558,261,812 |
| Nariño | 497,074,265 | 756,015,957 | 1,164,558,531 | 1,681,263,351 | 2,312,346,471 | 3,680,454,974 | 5,190,744,992 | 5,527,845,824 |
| Northern Santander | 20,126,216 | 30,815,649 | 44,799,250 | 63,191,042 | 86,910,576 | 177,312,736 | 228,532,360 | 239,859,491 |
| Putumayo | 48,336,194 | 106,669,464 | 216,857,789 | 317,413,142 | 442,814,221 | 632,701,814 | 882,538,932 | 956,283,939 |
| Risaralda | 53,622,084 | 82,101,640 | 175,406,221 | 247,417,123 | 340,288,346 | 419,292,103 | 582,073,221 | 605,802,915 |
| Sucre | 0 | 129,967,441 | 188,944,479 | 266,513,383 | 366,552,492 | 634,819,918 | 816,960,458 | 855,047,543 |
| Tolima | 15,725,044 | 24,076,774 | 47,186,859 | 91,245,077 | 303,375,277 | 536,293,834 | 881,453,181 | 1,014,517,948 |
| Valle Del Cauca | 28,961,868 | 49,863,692 | 75,124,869 | 122,562,925 | 168,568,368 | 245,937,057 | 372,054,408 | 405,407,157 |
| Vaupés | 193,676,483 | 298,251,285 | 435,586,435 | 614,411,224 | 845,038,056 | 1,017,054,858 | 1,303,651,997 | 1,353,229,088 |
| Vichada | 154,043,153 | 251,384,454 | 370,922,952 | 523,200,963 | 719,590,859 | 973,723,343 | 1,248,211,093 | 1,299,533,796 |
| **Total** | **4,857,582,003** | **8,099,212,724** | **12,392,453,271** | **17,762,277,332** | **24,959,666,543** | **33,992,279,130** | **45,838,337,790** | **49,710,225,532** |

*Source:* National Planning Deparent of Territorial Development (2001).

BEST COPY AVAILABLE

**Table A.IV.2 Distribution of Resources by Fiscal Sector Prioritized by Indigenous Authorities, 1994–99**

| *Sector* | *1994* | *1995* | *1996* | *1997* | *1998* | *1999* | *Average* |
|---|---|---|---|---|---|---|---|
| Education | 24.50 | 21.50 | 21.12 | 18.45 | 16.75 | 17.82 | 20.02 |
| Potable Water and Basic Sanitation | 22.70 | 18.30 | 13.50 | 23.39 | 16.20 | 7.86 | 16.99 |
| Health | 17.70 | 14.60 | 11.70 | 13.32 | 15.84 | 10.31 | 13.91 |
| Agrarian Sector | 7.90 | 10.40 | 11.70 | 8.46 | 9.26 | 18.90 | 11.10 |
| Institutional Development | 7.30 | 9.90 | 9.60 | 8.24 | 11.24 | 9.59 | 9.31 |
| Housing | 3.60 | 6.40 | 4.30 | 3.21 | 5.37 | 6.35 | 4.87 |
| Culture | 1.40 | 5.80 | 6.30 | 3.38 | 5.35 | 6.48 | 4.78 |
| Physical Education, Sports, and Recreation | 3.90 | 5.80 | 6.30 | 1.92 | 2.50 | 3.18 | 3.93 |
| Roads | 5.70 | 4.40 | 4.90 | 0.00 | 3.47 | 4.00 | 3.75 |
| Electrification | 0.40 | 2.50 | 2.10 | 2.95 | 2.29 | 3.09 | 2.22 |
| Other | 0.00 | 0.00 | 0.00 | 7.60 | 1.46 | 3.18 | 2.04 |
| Community Development | 0.00 | 0.00 | 0.20 | 2.59 | 2.94 | 2.61 | 1.39 |
| Project Management | 0.00 | 0.00 | 0.00 | 1.43 | 3.81 | 1.81 | 1.17 |
| Social Welfare for Vulnerable Groups | 0.80 | 0.50 | 0.80 | 0.41 | 0.78 | 2.37 | 0.94 |
| Disaster Prevention and Services | 0.30 | 0.50 | 1.00 | 0.64 | 0.44 | 0.70 | 0.60 |
| Construction and Maintenance | 0.00 | 0.00 | 0.00 | 3.21 | 0.00 | 0.00 | 0.54 |
| Transport | 2.80 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.47 |
| Justice | 0.10 | 0.30 | 0.40 | 0.43 | 0.40 | 0.50 | 0.36 |
| Planning | 0.00 | 0.00 | 0.00 | 0.00 | 0.99 | 0.34 | 0.22 |
| Equipping Municipalities | 0.00 | 0.00 | 0.00 | 0.00 | 0.63 | 0.58 | 0.20 |
| Public Services for Homes | 0.00 | 0.00 | 0.00 | 0.36 | 0.20 | 0.23 | 0.13 |
| Citizen Security | 0.00 | 0.00 | 0.00 | 0.02 | 0.09 | 0.05 | 0.03 |

*Source:* DNP–UDT: Evaluation and follow-up reports on resources transferred to homelands, 1994, 1995, 1996.

DNP–DDT: Follow-up and evaluation of the participation of indigenous homelands in public investment during 1998 and 1999, document for territorial development Number 54, November 2001.

## References

Arango, Raúl, and Enrique Sánchez. 1998. "Los pueblos indígenas de Colombia." TM, National Planning Department. Bogotá.

Health Ministry/Pontificia Universidad Javeriana/Pan-American Health Organization. 2000. "Perfiles de salud en poblaciones indígenas colombianas 1992–1993." Bogotá.

Instituto Humboldt de Investigaciones de Recursos Biológicos. 1998. "Colombia Biodiversidad Siglo XXI." Bogotá.

Ministry of the Environment. 2000. "Plan Nacional de Desarrollo." Proyecto Colectivo Ambiental. Bogotá.

National Planning Department. 1998. "Plan Nacional de desarrollo de la población Afrocolombiana 1998–2002." Bogotá.

National Planning Department/Ministry of the Environment. 1996. "Documento CONPES 2834." Bogotá, January 31.

Negra, Oveja (ed.). 1994. "Amazonia sin mitos." Second edition. Comisión Amazónica de Desarrollo y Medio Ambiente. Colombia.

Perafán, Carlos Cesar. 1995. "The Impact of Illicit Crops on Indigenous Peoples." Washington, D.C.: Inter-American Development Bank.

Piñeros, Marión, and Maga Ruiz. 1998. "Estudios Demográficos en comunidades Indígenas de tres regiones de Colombia." *Salud Pública de México*, 40 (4), July–August.

Sánchez, Enrique, Roque Roldán, and María Fernanda Sánchez. 1992. "Bases para la conformación de las Entidades territoriales Indígenas." ETIS–DNP. Santa fe de Bogotá.

______. 1993. "Derechos e identidad: Los pueblos indígenas y negros en la Constitución Política de Colombia de 1991." COAMA, Editorial Disloque. Bogotá.

Sánchez Jiménez, Oscar. 2000. "La población indígena en el sistema general de seguridad social en salud." In Juan Carlos Girado Valencia, ed., *Ejercicio del derecho a la salud*. Defensoría del Pueblo. Bogotá.